

OUR  
20th YEAR

BADGER STATE

# Smoke Signals

For Radio Amateurs • By Radio Amateurs

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## VK9ZM/Mellish Reef & Willis Island/VK9ZW



David Schmocker, KJ9I, of Oconomowoc, WI, was the 160 meter operator during a recent DXpedition to Mellish Reef (VK9ZM) and Willis Island (VK9ZW). Here are DXpedition operators KJ9I (the author), ZF2KN, VE3IEO, NM2L, VE3CPU, JR1RCQ, and KP2HE. Read Dave's story, beginning on page 14 of this issue.

## No-Code License Under Study By ARRL Committee

Many members are asking American Radio Relay League officials what is "ARRL policy" with regard to the current discussion of a possible no-code class of amateur license. Here is some background.

After the FCC was forced to back away from its own 1983 no-code proposals, the ARRL Board established goals for growth in the number of FCC amateur licensees, and in the ARRL membership. Given that at the time there was strong sentiment against reducing the entry-level requirements for an amateur license, ARRL looked for ways to improve the marketing and increase the attractiveness of the entry-level license. These efforts led to the Novice Enhancement proposal, which was submitted to the FCC in mid-1985, and was adopted in early 1987.

(Please turn to page 15)

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ELMER

by Rich Regent, K9GDF





## Swapfests and other Social Events

APRIL 8, 1989. Rochester Area Swapfest, John Adams Jr. High School, 1525 NW 31st St., Rochester, MN. Contact RARC c/o NØHZN, 2824 NW 24th St., Rochester, MN 55901

APRIL 9, 1989. Madison Area Repeater Assn. Swapfest, Dane County Expo Center, Forum Bldg., Madison, WI. Contact MARA, Box 4007, Madison, WI 53711, or phone (608) 274-5153. (see ad last issue for complete details.)

APRIL 15, 1989. The 1989 RiverLAN Spring Packet Conference. See the Wisconsin Packeteer section in this issue for details.

APRIL 28-30. The Dayton Hamvention! - The biggest ham gathering in the world.

MAY 6, 1989. The Ozaukee Radio Club, Inc. will sponsor its eleventh Annual Swapfest, at the Circle B Recreation Center, Highway 60, Cedarburg, WI. Sellers admitted at 7:00 a.m. and general admission at 8:00 a.m. Amateur License exams will be given between 8:00 a.m. and 10:30 a.m. by the Badger Examiners (see Testpoint). Admission is \$2.00 in advance or \$3.00 at the door. Four foot tables are \$2.00 each, in advance only. Food and refreshments will be available. For tickets, tables maps, or more information send business size SASE to ORC SWAPFEST, N4515 Crystal Springs Ct., Fredonia, WI 53021.

SATURDAY, MAY 13, 1989, the Lakeshore Hamfest, sponsored by the Mancorad Radio Club, will be held at the Manitowoc County Expo Center, intersection of Hwys. 42-141 and I-43 on County Hwy. "R", 8:00 a.m. (7:00 a.m. for vendors). Accommodations for vendor drive-in. Advance tickets: \$2.00, or \$3.00 at the door. Swap

tables: \$3.00. FCC exams, refreshments, prizes. Talk-in on 146.61 and 147.03. Hamfest camping available. Contact: Mancorad Radio Club, P.O. box 204, Manitowoc, WI 54220.

JULY 8, 1989. South Milwaukee ARC Swapfest, Oak Creek, WI. Buy-Sell-Swap-Food-Drinks-Prizes-Camping. Amateur Radio Exams. (see ad on last page, and watch for full ad as date gets closer.)

JULY 15, 1989. Annual Eau Claire Hamfest sponsored by the Eau Claire ARC. 8:00 a.m. to 2:00 p.m. at the 4-H buildings on Fairfax St. behind Highland Mall. Free tables for ham gear, free coffee, good food at good prices, door prizes, commercial exhibitors. Amateur license tests given from 9:00 am to 1:00 p.m. - all walk-ins. Admission tickets \$2.00. Contact Gene Lieberg, 2840 Saturn Ave., Eau Claire, WI 54703.

AUGUST 19, 1989. The 8th annual Green Fox A.R.C. Picnic/Auction starting at noon. (Rain date August 20). Free food, drink and visiting. Prizes will include a gift certificate for two for a flight on the Hot Air Balloon "Wisconsin", which is based in Ripon, WI and officially represents the State. As always, there is no admission to this event. The proceeds of the auction pay for the costs incurred. Bring some pocket money to bid at the auction. For donations or more information, contact Jack Bremer, KB9WC, Route 1, Box 142, Markesan, WI 53946. (414) 398-2247

OCTOBER 15, 1989. The 11th Annual Fall Ham & Computer Swapfest, Waukesha, WI., sponsored by the Kettle Moraine Radio Amateurs, Inc. Contact KMRA Swapfest, 313 Hillview Circle, Waukesha, WI 53188.

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas.

Send information on your event to Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages.

## Club Meetings

**BADGER AMATEUR RADIO SOCIETY**  
(W9YT - UNIVERSITY OF WISCONSIN - MADISON)  
Monthly while school in session - 2nd Wednesday - 7:30 p.m. - B-314, Electrical Engineering Building.

**CENTRAL WISCONSIN RADIO AMATEURS, LTD.**  
(STEVENS POINT)  
Second Wednesday.

**EAU CLAIRE AMATEUR RADIO CLUB**  
2nd Tuesday - 7:30 p.m. - Parks and Recreation Bldg., Oxford and 1st Streets, Eau Claire. Hams, guests welcome. Travelers welcome on wide area club repeater K9UXP, 146.31/91.

**FOUR LAKES AMATEUR RADIO CLUB (MADISON WI)**  
First and third Tuesdays - 7:30 p.m. - Red Cross Bldg., 4860 Sheboygan Ave.

**FOX CITIES AMATEUR RADIO CLUB**  
Third Monday - 7:00 p.m. - Roosevelt Jr. High School, 318 E. Brewster St., Appleton. Info: (414) 735-6294.

**GREEN BAY MIKE AND KEY CLUB**  
Second Thursday - Red Cross Bldg., corner Danz and Deckner, Green Bay.

**GREEN FOX AMATEUR RADIO CLUB**  
Third Monday - 7:30 p.m. - Green Lake Town Hall, int. of county hwy. K and N.

**KETTLE MORaine RADIO AMATEURS**  
Second Friday, 7:30 p.m. at the Kettle Moraine High School, located near the intersection Hwys 18 & 83 in Wale, WI.

**LAKEShORE RPTR. ASSN.**  
Last Tuesday, Jan., Apr., Jul., & Oct., 7:30 p.m. Red Cross Bldg., 4521 Taylor Ave., Racine, WI.

**MANITOWOC COUNTY RADIO AMATEURS**  
Board meeting, First Wednesday.  
General meeting, Second Wednesday - both meetings held at 7:00 p.m. at the Red Cross Building, 1816 Washington St., Manitowoc.

**MENOMONEE FALLS AMATEUR RADIO CLUB**  
Last Tuesday - Doors open 7:30 p.m., meeting begins 8:00 p.m. - Security Savings and Loan, Menomonee Falls. Amateurs and guests welcome.

**MILWAUKEE RADIO AMATEURS CLUB**  
Fourth Thursday - Wauwatosa Savings and Loan, 7500 W. State St. (November on the third Thursday. No meetings in July, August and December.) Meetings begin at 7:00 pm.

Old Timers Party & Spring Get-Together on May 11, 1989 at Kuglitsch's, 16000 West Cleveland Ave. This party is OPEN TO ALL. \$10.00 per person. Contact MRAC, P.O. Box 91, Milwaukee, WI 53201.

**OZAUKEE RADIO CLUB**  
Second Wednesday - 7:30 p.m. - Saukville Community Center.

## BADGER STATE SMOKE SIGNALS

### OFFICERS AND STAFF

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### SUBSCRIPTIONS

1 year	(12 issues)	\$8.50
2 years	(24 issues)	\$16.00
3 years	(36 issues)	\$23.00

ADDRESS CHANGES AND CORRECTIONS should be sent to Kenneth A. Ebner, address above.

EDITORIAL MATERIAL, PHOTOGRAPHS, FEATURE ARTICLES, AND EXCHANGE PAPERS should be sent to Jim Romelfanger, address above.

DISPLAY ADS or INQUIRIES REGARDING DISPLAY ADS may be directed to Harry Westlund or Kenneth Ebner, addresses above.

SUBSCRIPTIONS should be sent, with check or money order (do not send cash), to Jim Decker, address above.

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### EDITORIAL DISCLAIMER

The opinions expressed in editorials, guest editorials, columns, articles, and letters are the opinions of the authors only, and do not, unless otherwise stated, express or imply agreement or endorsement by Badger State Smoke Signals, or by any other organization.

QCWA - WISCONSIN CHAPTER #55

For information about QCWA, contact Richard Regent, K9GDF or Mickey Dolgin, KB9G. The Wisconsin Chapter holds Spring and Fall dinner meetings. (Watch BSSS for dates.) You are invited to check in the QCWA net on Sundays on 3.985 MHz. at 8:30 a.m.

QCWA - SOUTHEAST WISCONSIN CHAPTER #162

Meets third Monday monthly, 7:30 p.m., Around the Clock Restaurant, 3012 Rapids Drive, Racine.

RACINE MEGACYCLE CLUB

Second Monday, 7:30 p.m., Red Cross Bldg., 4521 Taylor Ave., Racine, WI

RIVERLAND AMATEUR RADIO CLUB

First Tuesday - 7:30 p.m. - Onalaska Community Center, Onalaska WI.

ROCK RIVER RADIO CLUB

First Tuesday - 7:30 p.m. CST, 8:00 p.m. CDT - Dodge County Sheriff's Dep't, 141 N. Main, Juneau WI. ARES net - 146.64 MHz., Monday 7:30 p.m. CST, 8:30 p.m. CDT. 7277 Khz., Saturday 10:30 a.m.

SHEBOYGAN COUNTY AMATEUR RADIO CLUB

Second Tuesday - 7:00 p.m. - Sheboygan Red Cross/Boy Scout Bldg., 2032 Erie Ave.

SOUTH MILWAUKEE AMATEUR RADIO CLUB

First Wednesday - Legion Post 434, Shepard Ave., Oak Creek WI. Auctions in March and October.

TRI-COUNTY AMATEUR RADIO CLUB

Second Sunday of each month. Meetings are held at 7:00 p.m., at the Trinity Lutheran Church, 314 Barrie, Fort Atkinson, WI.

WASHINGTON COUNTY AMATEUR RADIO CLUB

Second Tuesday: ARES/RACES - 7:30 p.m., club meeting - 8:00 p.m., Town of Polk Town Hall, Hwy. 60 and Scenic Dr. Net on 146.13/73 every Monday 7:30 p.m.

WATERTOWN AMATEUR RADIO CLUB

First Thursday of the month at 7:00 p.m., Eaton Corp., 901 s. 12th St., Watertown, WI

WEST ALLIS RADIO AMATEUR CLUB

Second Tuesday - 8:00 p.m. - St. Francis Savings, 9330 W. Greenfield Ave.

WISCONSIN ASSOCIATION OF REPEATERS

Meetings are held Quarterly, with time and location to be announced. Repeater licensees, trustees, and sponsors are urged to attend W.A.R. meetings. All interested parties are welcome, as well.

WISCONSIN VALLEY RADIO ASSOCIATION (WAUSAU)

First Tuesday - 7:30 p.m. - Location varies; info on 146.04/64, Wausau.

YELLOW THUNDER AMATEUR RADIO CLUB (BARABOO)

Days rotate: 1989 meeting dates: Thu., Apr. 13, Mon., May 15, Tue., Jun. 13, Wed., Jul. 19, Thu., Aug. 17, Mon., Sep. 18, Tue., Oct. 17, Wed., Nov. 15, Thu., Dec. 14, 1989. Monday meetings in room 28B of the Baraboo Civic Center; all others in room 25. Meetings start 7:30 p.m.

## The TEST POINT



The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area: (Underlined are added since last months BSSS.)

April 5, 1989	Milwaukee, WI (MRAC)
April 15, 1989	Milwaukee, WI (BE)
April 15, 1989	Eau Claire WI
April 22, 1989	Madison, WI
April 23, 1989	Tomah, WI
May 3, 1989	Milwaukee, WI (MRAC)
May 6, 1989	Milwaukee, WI (BE)
	(Ozaukee Swapfest)
June 7, 1989	Milwaukee, WI (MRAC)
June 17, 1989	Menomone, WI
June 18, 1989	Stevens Point, WI
July 15, 1989	Eau Claire WI
September 16, 1989	Milwaukee, WI (BE)
October 14, 1989	Eau Claire WI
November 11, 1989	Menomone, WI
December 2, 1989	Stevens Point, WI
Monthly, First Sat.	Racine, WI
Monthly, Last Sun.	Tomahawk, WI
Monthly, Third Sat.	Loves Park, IL
Minnesota tests listed at end of column	

### GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Most examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 25¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$4.75 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

### MILWAUKEE RADIO AMATEURS' CLUB - MRAC/VEC

April 5, 1989, May 3, 1989, and June 7, 1989  
Tests are Wednesday evenings at 7:00 p.m. at Wauwatosa East High School, North 74th Street and Milwaukee Avenue. Enter through the southmost entrance on 74th Street. Go to room 256 on the second floor. Please arrive promptly so testing can be completed before 10:00 p.m. Bring your original license and three good photocopies, a pen, and \$4.55 for the exam fee. Walk-ins accommodated as time permits. Register in advance on a Postal Service 15 cent post card; print the grade of license you are applying for, and your name, address, and telephone number. Send the

card to The Milwaukee Radio Amateurs' Club, Inc., 3840 South 43rd Street, #21, Milwaukee, WI 53220. For further information, contact Ed Seruga, KE9JJ, Secretary, MRAC at the above address. Telephone: (414) 545-6299 or (414) 546-0647.

### BADGER EXAMINERS (BE) - MILWAUKEE

1989 examination dates: April 15, May 6 (Ozaukee Swapfest), and September 16.

Unless otherwise noted, examinations are administered beginning at 1:00 p.m. at St. Nicholas Parish, 5353 N. Green Bay Ave. (2 1/2 blocks south of Silver Spring), Milwaukee. Number for coin telephone at exam location is 228-9994. Walk-ins are welcome. To register in advance, send a post card with your name, test or tests you wish to take, date you wish to be tested, your call sign, address and telephone number to Badger Examiners, Gary J. Sharbuno, WA9UJK, 5119 W. Willow Rd., Brown Deer, WI 53223.

### MADISON, WI - April 22, 1989

Fire Station #2 on Grand Canyon Dr.

### TOMAH, WI - April 23, 1989

Sponsored by Tomah Repeater Association. Pre-register with or get more information from Bill Bastian, N9BOE, 702 Farmer Ave., Tomah WI 54660. (608) 372-7293, or call N9BOE on 145.39 repeater.

### EAU CLAIRE, WISCONSIN

1989 examination dates: April 15, July 15, October 14

The July exams will be given in association with the Eau Claire Hamfest at the 4-H Junior Fair Grounds. All other tests will be given in the Facilities Management building on the University of Wisconsin - Eau Claire campus. Exams are given from 9 a.m. until noon. All walk-ins accepted. For further information, call Carl Searing, W9NW, at 715/834-1303.

### MENOMONIE, WI (ARRL/VEC)

June 17, November 11, 1989.

Sponsored by the Dunn County ARC. Walk-ins only. Credit Union Office Building, Conference Room, lower level, 444 S. Broadway, Menomone, WI. Contact: Dr. Thomas W. King, KD9TI, c/o office, 444 S. Broadway, Suite 1, Menomone, WI 54751. (715) 235-4747 (O), 235-5757 (H).

### RACINE, WISCONSIN - ARRL/VEC

First Saturday of each month except during summer and the Christmas holidays.

Exams are given at the Red Cross Building, 4521 Taylor Ave., Racine, WI. Walk-ins are permitted.

Send pre-registration to: William R. Firchol, Jr., N9DMP, 1912 27th Street, Kenosha WI 53140.

### Last Sunday of every month.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No pre-registration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Greg Garner, WA9W, 4088 Highway 51, Harshaw, WI 54529. Telephone (715) 453-7096.

(continued on page 19)

# Wisconsin Nets Association Ltd.

## WISCONSIN NETS

Net	WNA	Freq	UTC	CDT	Manager
BWN	Yes	3984	1100	0600	KC9CJ
BEN	Yes	3985	1700	1200	KA9KII
WSBN	Yes	3985	2230	1730	K9ANV
WNN	Yes	3723	2300	1800	KA9TTM
WSSN	Yes	3645	2330	1830	N9BDL
WIN/E	Yes	3662	0000	1900	WB9ICH
WIN/L	Yes	3662	0300	2200	W9NGP
NWTN	Yes	34/94	2330	1830	NS9Q
Gr. Bay	No	72/12	0145 Thu.	2045 Wed.	WB9NRK
RACES	No	3993.5	1715	1215	WC9AAG
			USB Tues and Thurs		
RACES	No	3993.5	1300	0800	WA9OAY
			LSB Sunday		

## Section Manager's notes



Richard R. Regent, K9GDF  
5003 South 26th Street  
Milwaukee, WI 53221

The Ozaukee RC will hold its annual ARRL sanctioned Swapfest May 6th starting 8:00 a.m. at the Circle B Recreation Center, Highway 60 and County 1, north of Cedarburg. Walk-in exams beginning at 9:00 a.m. will be given by the Badger Examiners with exam info from WA9UJK.

May 13th, Tri-County Hamfest sponsored by MarCoRad and Sheboygan 220 Clubs starting at 8:00 a.m. at the Manitowoc County Expo, Highways 42, 151, and I-43 on County Highway R. Amateur exams will be available.

Milwaukee RAC members promoting Amateur Radio to prospective amateurs and have brand new club roster by name and calls; they will have exams on May 3rd starting 7:00 p.m. at Wauwatosa East High School, contact KE9JJ for details.

May 11th, Oldtimers' Spring Dinner Party at Kuglitch's, 16000 West Cleveland Avenue, New Berlin, cocktails at 5:30 and dinner at 6:30 p.m.; reservations with KD9AJ.

For an up-to-date list of Wisconsin repeaters, contact the Wisconsin Association of Repeaters, P.O. Box 23928, Milwaukee, WI 53223.

New officers Madison DX Club: Pres. N9ADN; V. Pres. WB9NOV; Sec./Treas. K9VAL.

New officers Taylor County Area ARC: Pres. W9LEE; V. Pres. N9GEN; Sec. N9GHZ; Treas. WD9FWP.

Ask our SEC, W9ZAG, about the new free Emergency Coordinator's Training and Certification Course.

Tri-County ARC assisted at Valentine's Run at Countryside.

Outagamie County ARES Net meets Wednesdays at 9:00 p.m. on 16/76 repeater.

The Watertown ARC Emergency Net meets Thursdays at 6:30 p.m.

Four Lakes ARC President NB9C says 70 percent of club members own a computer and the same number hold either an Extra or Advanced class license. FLARC also has a new member directory.

Sorry to report Silent Key W9HSY.

NB9H, Bill, moved to Fond du Lac with new job at Goodrich High School teaching graphic communications and power mechanics, besides recently graduating with two majors in Education. Bill will soon be back on 75 meters.

W9NK became father of new girl named Arielle.

W9VQD is reading about submarines, but still surfaces frequently to enjoy ham radio.

If you like short wave listening, try 10.454 MHz Voice of America. I hear them having two different programs going on at the same time, one on each sideband. Sometimes music on one, voice on the other, sometimes two different languages. Is this an idea for conserving spectrum?

## EMERGENCY COORDINATOR APPOINTMENTS ANNOUNCED

Fred Wendt, W9ZAG, Section Emergency Coordinator for the Wisconsin Section, has announced the following appointments:

Jim Boos, WB9YSG, Delafield, has been appointed Special Emergency Coordinator/National Weather Service - Sullivan, WI.

The NWS will be moving their Milwaukee office to a facility at Sullivan, which is west of Milwaukee.

John Offerdahl, KC9XH, Verona, has been appointed Special Emergency Coordinator/Severe Weather Operations/Baraboo 146.88 Repeater.

The Baraboo severe weather net covers 26 counties.

Sherman Carr, W9NGT, Hartford, has been appointed Assistant Section Emergency Coordinator.

Sherm retired recently as Emergency Government Director for Washington County. He served in the past as Section Emergency Coordinator.

John Leekley, WB9SMM, has been appointed Emergency Coordinator for the Metro Areas of Milwaukee and Waukesha Counties.

Ron Armstrong, WB9WRW, has resigned as Emergency Coordinator for Waukesha County.

Fred Wendt, W9ZAG, Section Emergency Coordinator, reminds all Emergency Coordinators to check page 65 of the March 1989 issue of QST regarding the EC Training and Certification Course. ECs are NOT required to take this course, but those who do will be certified as having completed the course.

Fred also asks ECs to PLEASE file the required form FSD-212 with him every month! This monthly report is a condition of appointment. The forms should be sent to Fred at W128 S6473 Berger Lane, Muskego, WI 53150.

During last Field Day we discovered that we have tired blood. A mosquito bit us, and he was too tired to take off.

When we first got our ham radio call, ten cents was a lot of money.....but dimes have changed.

The XYL was out of town the other day and we were trying to figure out how long to cook minute rice.

The above and others are from ARNS bulletin.

WAPR -- Comments on Packet (continued from page 18) of mail, traffic and bulletins to/from other major BBSs.

Another problem is the operator that checks into all major BBS's in the state to see if he has mail, or if one BBS might just have a bulletin that his Local BBS does not have. This usually requires the use of many digipeaters and Net/Rom's to accomplish. This creates unnecessary congestion on 145.01 with this type of operation. The major BBSs forward bulletins, traffic and messages between each other. Your mail and traffic for your area will arrive at your local BBS. It is not necessary to check all of the other systems!

Another noticeable problem is the over-use of Beacons. I feel that beacons should never be used on 145.01. PBBs and stations should only use their beacon minimally on a LAN frequency and never thru a port. A station therefore suffering a time-out or other unwanted disconnect will minimize frequency disruption when it dumps it's transmit buffer data via the UNPROTO path specified. If someone has just gotten on the air and wishes everyone to know it, then enter this as a message to "ALL" on your local major BBS. As for the question, "If I don't run a beacon, then how will people know that I am around?", most major BBSs now have an updated list each month from WAPR. This list identifies all the Net/Roms, digipeaters, BBSs and PBBs in the state. The easiest way to find this bulletin on your local major BBS is to send "L@ WAPR" at the prompt. To ensure your PBBs will be listed in the next update, initiate a message to "SP WB9TYT @ WB9TYT" informing Dan of your PBBs and it's location. Note the use of the "SP (callsign)" command in the last sentence. When addressing messages to other persons by their call, always use the "SP (callsign)" format instead of "S (callsign)". Using "SP" eliminates these messages from being displayed to everyone except the addressee during BBS listings. Widespread use of "SP" could decrease frequency usage more than 25 percent! "SP" is a personal message, and can be read by others, however, the majority of messages are not 'sensitive' in nature. Use the "S (callsign)" only when necessary as some BBSs (WORLI) will actually classify these messages as a bulletin. This causes some problems with other BBSs (WA7MBL) if the sysop of that system is using \$B in a forwarding file. The result, the message will not delete from a RLI system after forwarding and the message will be distributed to all MBL systems as a general bulletin!

In my opinion there are a few other things we might consider. One would be to hold training/question & answer sessions at our local club meetings and swapfests on the proper use of BBSs, Net/Roms, etc. for new users of packet. This, I believe, will also take the fear of packet away from a few that have not made the commitment, but, have thought about it, and also bring back those that dropped out as a result of confusion with set-up and operation.

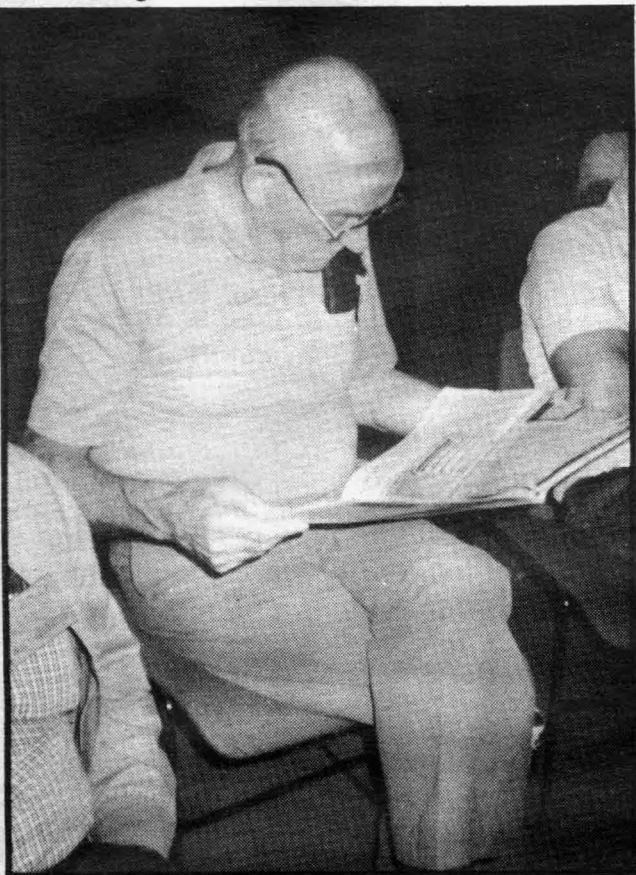
I believe that we should carefully consider all facets of packet radio, address the situations that are developing before they become problems in order to allow packet operations to grow in the most efficient manner.

Dave Melton, Sysop - KD9NV BBS





## HERE and THERE



DAN BYERSDORF, W9DB, above, looks over a copy of *Badger State Smoke Signals* during a lull in the action at an auction at a meeting of the Four Lakes Amateur Radio Club in Madison.

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THE TOMAH REGIONAL REPEATER GROUP has upgraded its 145.39 MHz repeater; a G7 antenna has been installed, replacing the one formerly used. That antenna, coupled with a Micor radio, has greatly improved the effective range of the system and the quality of the signals. Reports have been received from Winona MN, Wisconsin Rapids, Adams/Friendship, Osseo, and Viroqua.

The TRRC meets the first Wednesday of each month at 7:00 p.m. The location varies; information is available on their 145.39 MHz Tomah/Ridgeville repeater.

The Tomah Repeater Association will be purchasing a phone patch; additional

information will be available later regarding emergency calls/911 when the patch is ready and other details have been taken care of.

The TRA will sponsor amateur radio license exams April 23. Information or pre-registration goes to Bill Bastian, N9BOE, 702 Farmer Ave., Tomah WI 54660, (608) 372-7293, or call N9BOE on 145.39.

- Ken Teclaw, N9GXP

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**MAXIM MEMORIAL AWARD: NOMINATE NOW!** Now is the time to find that special young amateur who is setting a fine example of public service, education and goodwill through his or her Amateur Radio efforts.

The Hiram Percy Maxim Memorial Award (sponsored by the American Radio Relay League) is given annually to the licensed radio amateur under the age of 21 whose accomplishments and contributions are of the most exemplary nature within the framework of Amateur Radio activities, including, but not limited to, the following: Participation or leadership in organized affairs at the local or national level; technical achievement; operating record; recruitment and training of new amateurs; and public relations activities.

If you know of a deserving individual, please notify your Section Manager as soon as possible (SMs submit all nominations). Supporting information and endorsements by ARRL affiliated clubs will be reviewed by the award panel.

The winner will receive a cash award of \$1000, a suitably engraved plaque, and travel and accommodation expenses to enable attendance at an ARRL at which formal presentation will be made.

The Hiram Percy Maxim Memorial Award is intended to provide a tangible reward to those deserving young amateurs who contribute their time, skills and energies daily through their commitment to Amateur Radio.

Nominations must be received at ARRL Headquarters prior to June 12, 1989. That means that you, the ham community at large, must contact your SM with the name of your nominee as quickly as possible. There is no limit to the number of nominations that may be submitted, and the winner will be reported in an upcoming issue

of QST.

- The ARRL Letter

**EDITOR'S NOTE:** The 1986 winner of the Hiram Percy Maxim Award, chosen in 1987, was Scott L. Young, N9FZS, of Colby, WI; the 1987 winner, selected in 1988, was Stacey L. Garner, KA9WDE, of Harshaw, WI.

Nominations for deserving young Wisconsin amateurs should be sent, with supporting documentation, to Section Manager Richard Regent, K9GDF, 5003 South 26th Street, Milwaukee, WI 53221.

-----

**GOT SOMETHING FOR YOUR EDITOR?** Here's some (hopefully) helpful information:

A letter regarding the current debate over the no-code license issue was sent to me by packet radio, with an operator's note asking that it be forwarded to another station and to myself, "if you know which BBSs they frequent." Since I do not operate packet radio at all (I couldn't afford a knob for a TNC), and since nobody called my attention to it until March 11, the message waited in the W9WI BBS in Madison for two and a half months; it was originated on December 29, 1988. And, when I did discover its presence, I asked a Baraboo station to download it so I could have a hard copy - and he got the message for me, but only after a three-hour marathon of retries. The best way to get information to me is to use the U.S. Mail. It may be a little slow at times, but it's usually faster than the above!

Also, I can read MS-DOS ASCII text files ONLY if they are single-sided disks. Two were sent to me recently, and I couldn't read either one because they were double sided. One document was compressed as well; I couldn't have read that one, even if it had been single sided.

There is a remote possibility that we may have an MS-DOS system here some time (Lord knows, we could use one!), but that is likely to be a long, slow process, if it even happens at all. K9ZZ

-----

**GOING TO THE MADISON SWAPFEST** APRIL 9? Stop by the BSSS table and say hello! We'll be in W4 and W5, next to the ARRL table.



K9GDF

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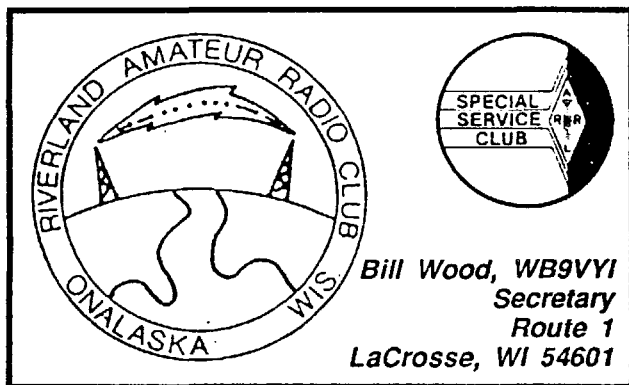
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**Bill Wood, WB9VYI**  
Secretary  
Route 1  
LaCrosse, WI 54601

#### Greetings.

The regular monthly meeting of the Riverland Amateur Radio Club was called to order at 7:34 p.m. on March 7, 1989, by President Dick Low, KØJYB.

When last month's minutes were called for, Charlie Burch, KA9UUK, spoke up, stating that last month's motion for accepting the minutes as written in the B.S.-S.S. was for all time. Rick Williams, KV9U, agreed that's what he'd understood, too. (It seems several of us misunderstood this.) I apologized for my mistake and said it would be corrected in the next report. Craig Goldbeck, N9ETD, stated that he was not at the last meeting, but felt our minutes were important; besides being standard procedure for business and other similar meetings, it also helps bring to mind what happened at the last meeting. Dick, KØJYB, said a new motion could be made to change this, if we cared to do so. Craig, N9ETD, made, and Art Osborn, WØJDC, seconded a motion to reinstate the reading of the minutes. The subject was then opened for discussion and Van Elston, WA9FIO, stated that some members do not receive the Smoke Signals, and this would be a good reason for reading the minutes during our meetings. A vote of 18 for, and 7 against, the motion reinstated the reading of the minutes at each meeting.

(One of the reasons for this discussion was to speed up the meeting a little, as we've run over so often. It was brought up by Craig, N9ETD, that shortly after he joined the club, that Rick, KV9U, and Greg, KA9FOZ, had introduced a motion, and it passed, that the meetings would last until 8:15, or 45 minutes. If we were in the middle of a discussion and wished to continue on, just a general raise of hands, a majority vote, would allow the meeting to continue until the business needing finishing was completed, then the meeting was over. This is noted to be a reiteration of previous minutes.)

The Minutes were then read and approved, with the one correction noted, and since dealt with. The Treasurer's report was then given and approved.

#### OLD BUSINESS

Dick, KØJYB, showed us sample badges that he was taking orders for at \$4.00 each. (Judging from the orders he was receiving, they went over pretty good.)

Craig, N9ETD, was then asked if club jackets were still available, and he answered in the affirmative; he was still tak-

ing orders.

Dick, KØJYB, brought up the fact that we are in need of various committee chairmen, such as Insurance, Entertainment, Field Day, Programs, Swapfests, etc. He said that George Kroner, KA9HOP, has volunteered to head up the Publicity department, and that Carl Olberg, W4ST, has been handling the insurance, but wants to be replaced. Charlie, KA9UUK, motioned that the president should select the chairman for each committee, and they in turn can select their own committee members. Craig, N9ETD, seconded this, and it was approved.

#### NEW BUSINESS

Dick, KØJYB, said Kent Helman called to tell us that there would be a Sky Warn training course given by Steve Thompson of the Weather Bureau. This is going to be on the 30th of March, which is on a Thursday night, in the city board room. There will be new slides presented at this time, so old members and new are invited to attend.

#### 37/97 REPORT

Van, WA9FIO, stated that the new repeater is working beautifully. We have our new amplifier working now; it is capable of 170 watts, and it is set right now at 60/70 watts. Dan, WCØV, said instruction sheets would be given out shortly. Craig, N9ETD, said after the meeting he would run over to make some extra copies for us.

Bruce Bjerstedt, K9CUT, asked about the difference between transmit and receiving coverages, our talk/hear ratio. We were told the ratio was just about right now; when a mobile rig can hear the repeater, it should be able to work it. There has been considerable experimentation so far, and it seems to be optimum for needs.

Curt Phelps, KA9YPF, told us there were app. 190 auto programmable dialing slots available for the membership.

A considerable amount of discussion was held on all kinds of different aspects we need to, or are dealing with presently.

If we have members who cannot make it to the meetings, they need to contact the head of the committee to receive their

information.

Rick, KV9U, made, and Dan, WCØV, seconded a motion to adjourn the meeting; the motion carried.

This night was our swapfest, so we all gathered around boat anchors and all sorts of other doodads and whatjamacallits. Feroz Ghouse, N9FJL/4S7FG auctioned off a few items for the repeater fund, and we all had a good time.

Respectfully submitted:

Bill Wood, Sec./Treas. RARC

#### MEMBERS PRESENT

John Jorenby	KA9ETH
Walter Altus	WD9GCR
Rick Williams	KV9U
Curt Phelps	KA9YPF
Phillip Long	KA9RLI
Phil Uehling	W9UP
Herman Ludvik	W9HJV
Dick Low	KØJYB
Glenn Whitlock	NØBBW
Charlie Burch	KA9UUK
Ernie Gershon	K9ZVU
Jim Brooker	N9DBK
Karl Simonson	None yet
Bruce Bjerstedt	K9CUT
Van Elston	WA9FIO
Feroz Ghouse	N9FJL/4S7FG
Craig Goldbeck	N9ETD
Duane Fruechte	W9HWQ
Dan McKenzie	WCØV
Ken Weigel	N9CDT
Al Reinholz	N9FZE
Jack Yoshizumi	W9KTD
Ron Reed	KD9OY
Bill Winder	K9EGQ
Jim Burcum	K9LBX
Tom Seropulos	KB9BVB
Nook Bentzen	K9EGO
Gary Webb	N19V
Hugh Barker	KA9EJZ
Bill Wood	WB9VYI

#### GUESTS PRESENT

Bob Selbrede	KA9EZR
Scott Lee	W9NSR
Jerome Grokowsky	WA9HCZ
Dick Kleppe	KØKTP
Rick Larkin (?)	KØPVB (??)

## Badger State Smoke Signals Club Deal

Badger State Smoke Signals can serve your club's members as your club's newspaper. Your club's news will be published monthly, along with other news - and photos - which you submit.

Here's how it works:

All members of club of less than 50 members: \$5.40 per member per year.

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munity leaders and/or prospective members. These categories are billed quarterly.

10 or more subscriptions from members of a club are \$5.60 per member per year. These subscriptions are payable in advance.

We also offer special low rates for non-commercial advertising, such as for Hamfests. And these offers are NOT restricted to Wisconsin clubs. For the full poop, contact Kenneth A. Ebnetter, K9-EN, 822 Wauona Trail, Portage, WI 53901, or call Ken at 608/742-3560.





## John's Junk Box

By John W. Frank, WB9TQG  
P. O. Box 5113  
Madison, WI 53705

The scientific community began the change from cycles per second to Hertz as the basic unit of frequency measurement about twenty-five years ago. Unfortunately, a few people never made the transition, and are still using cycles instead of Hertz. Newcomers to ham radio may find references to megacycles and kilocycles in old books and magazines.

This special "junkbox" article has been carefully researched. All calculations were verified on a TI-59 programmable calculator, and double-checked on the slide rule I used when I was attending the University of Wisconsin. Twenty-six pages of analytic geometry, algebra, and differential calculus were condensed into one nomograph. This nomograph covers the frequency range of one megahertz to one gigahertz, or one megacycle to one gigacycle, depending on which way you are converting frequencies.

To convert from megacycles to megahertz, find the frequency in megacycles on the left scale, draw a line through that frequency and the bullseye. Continue that straight line until it intersects with the scale on the right, and read off the frequency in megahertz. To convert from megahertz to megacycles, find the frequency in megahertz on the right hand scale. Draw a line from that frequency through the bullseye. Continue that straight line to where it intersects with the left scale, and read off the frequency in megacycles.

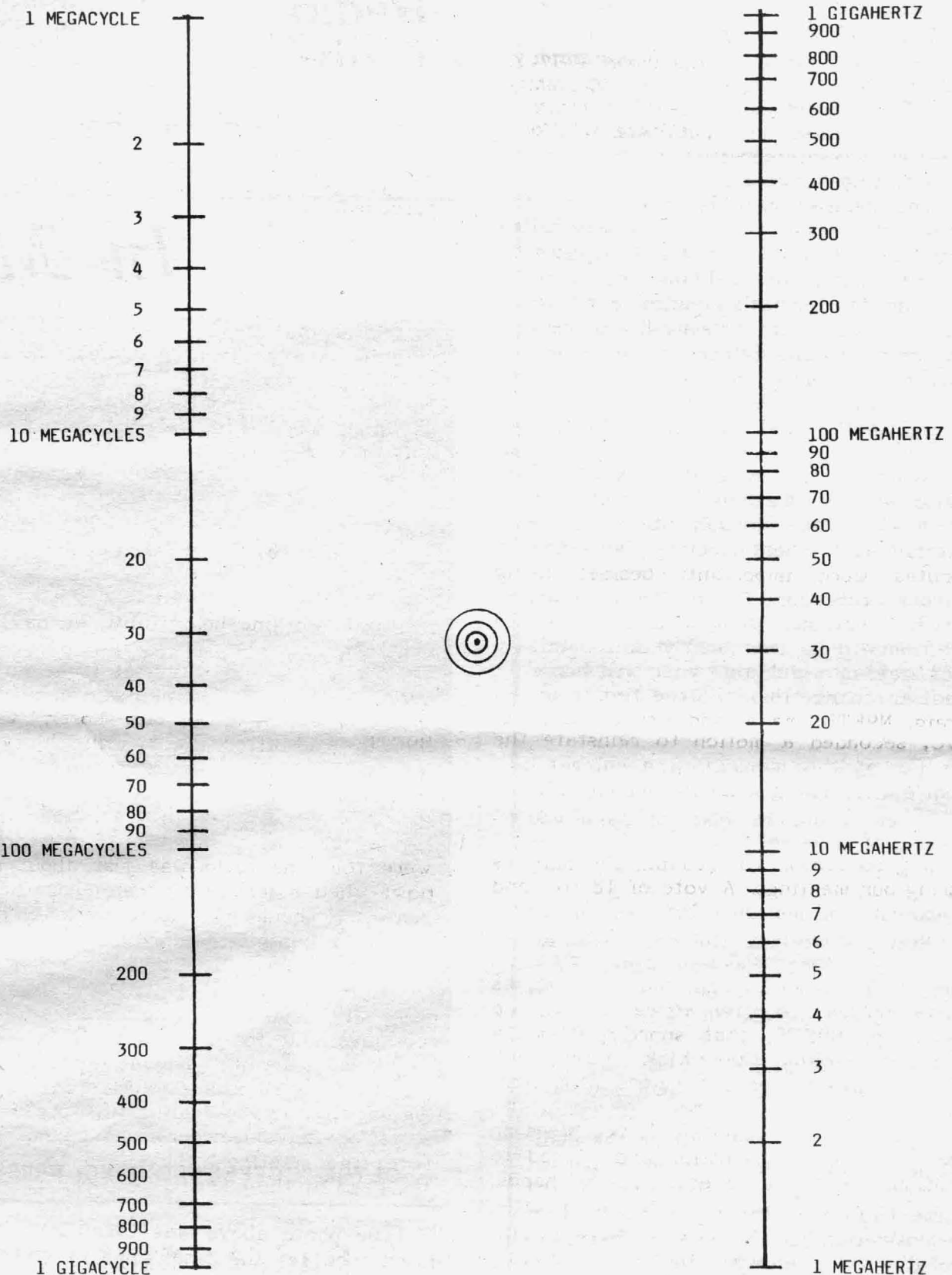
That's all there is to it. There are no complex equations, no confusing formulas, and you don't even need a microcomputer to make the conversions from cycles to Hertz.

73, and keep smiling. It makes people wonder what you're up to.

*John*

# Frequency Conversion Nomograph

Cycles to Hertz/Hertz to Cycles



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## Morse Telegraph Club Special Events

### MORSE'S BIRTHDAY CELEBRATION

Saturday, April 29 will again see the gathering of the Morse Telegraph Club at the Mid-Continent Railway Museum, North Freedom, Wis., to honor the birth date of Samuel F. B. Morse, the inventor of the telegraph.

With regret, we must announce that this will be the final year that Western Union will furnish a nationwide wire to hook up the 40 club chapters throughout the U.S. and Canada. Plans are being made already for future years to either use ham radio with telegraph converters, or telephone-telegraph equipment invented by some of our members.

### SPECIAL EVENT STATION AD9E

Saturday and Sunday, May 27-28 (Memorial Day weekend), members of the "M-W" Chapter will be operating special event station AD9E from the North Freedom site. The station will operate 1400-2359Z on 7044, 7144, 10117, 21044, and 28044 KHz.

This will be the third year for this "SE" station, which this year will honor the 145th anniversary of the first telegraph message, "What Hath God Wrought".

Any ham interested in doing some operating at North Freedom, or just visiting, we would be glad to have you drop in. Most of the operating will be in International Morse, but we will also use American Morse, if the station contacted so desires.

Stations working the special event station may QSL via Bob King, KA9-GNY, 411 Lynn Avenue, Baraboo, WI 53913. Please enclose an SASE.

### WISCONSIN DELLS DEPOT DEDICATION

Saturday, June 10, will be the dedication of the new Railroad Depot at Wisconsin Dells, Wis. Members of the Morse Club are planning some kind of demonstration for this event. There will probably be a straight land line telegraph wire from the depot to some outside location. Also, it is being considered to send the telegrams originated at the depot, and have W9KKM (in Wisconsin Dells) pass them along to a traffic net; we'll try to have more about this in a later issue of BSSS.

Here again, we might be able to use the assistance of other hams, so please keep it in mind.

73,

Bob King, KA9GNY  
Morse Telegraph Club,  
"M-W" Chapter  
Mid-Continent RY Museum

## Eau Claire Amateur Radio Club

Bob Fallis, W9BAR,  
Secretary  
1851 McKinley Road  
Eau Claire, WI 54703

The next meeting of the Eau Claire

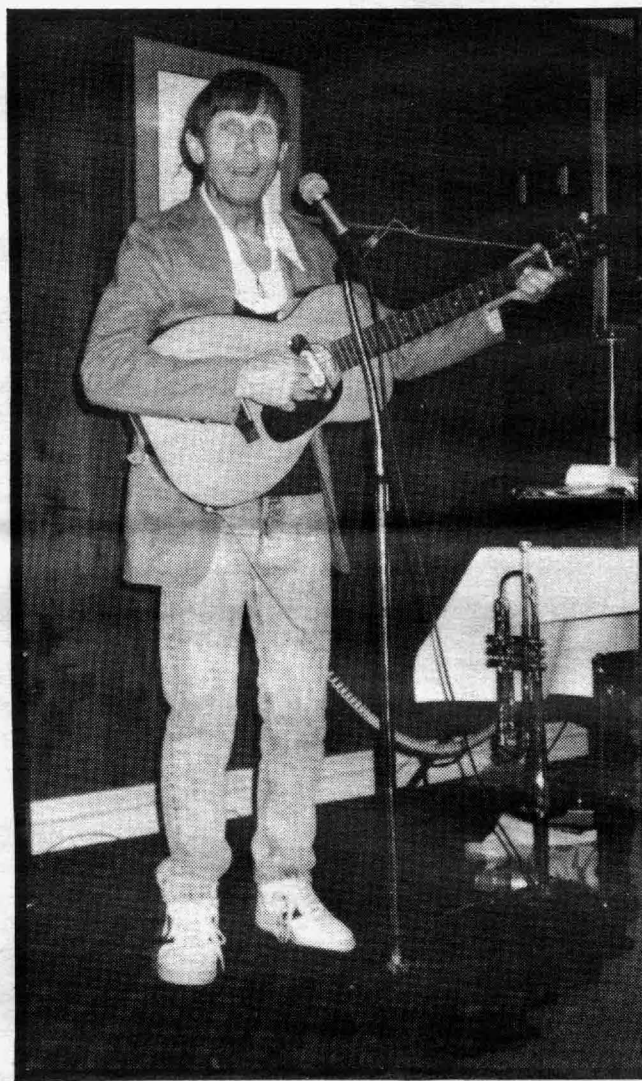
Amateur Radio Club will be held Tuesday evening, April 12th, 1989. The meeting will start at 7:30 in the Parks and Recreation Building, 1300 First Avenue.

The worst blizzard of the year cancelled our March meeting for us. A seven inch snowfall, combined with 45 mile per hour winds, made travel almost impossible. We hope that missing this meeting just encourages our members to make an extra effort to attend our next meeting.

See you all in April.

Bob Fallis, W9BAR, Secretary

## In Memoriam



CLYDE "COFFEE" DOWNING, W9HSY

(The photo above was taken as Clyde entertained for the final time at the annual Christmas Party for the Madison Area Repeater Association, held in December, 1988, at the Heritage House in Madison, WI. The following is from "Smoke Test",

the newsletter of MARA, of which Clyde had been president since that club began 17 years ago.)

One of the saddest announcements we've ever had to make is that Clyde, W9HSY, has become a Silent Key. Clyde passed away on Friday, February 17, at about 6:45 a.m.

As many of you know, Clyde was MARA's president since the club was founded. Clyde was MARA, and put forth much effort to make us the great club we are. It would be impossible to list all the accomplishments made possible by the dedicated effort of this fine person and ham, and I do mean ham!

Many of us remember Clyde as our first 2-meter contact. If you needed information, it seemed Clyde was always on the repeater. You might have been headed home in the wee hours from a party or a trip out of town; chances were good that Clyde would be on the repeater too, as he headed home from a record hop. If you wanted to find Clyde, you had only to say you were buying coffee, and out of nowhere, there he was. In about two years, Clyde put just under 200,000 miles on his car, mostly taking up offers to meet this ham or that, for coffee or a bite to eat.

As Clyde traveled and talked, he built MARA's reputation as one of the friendliest clubs on the air. We can only hope to keep his memory alive by welcoming, as he always did, every person who gets on the MARA repeaters.

73, Clyde, from all of us. We can never thank you enough for being you.



## BSSS Advertising Manager Resigns

For health reasons, Harry Westlund, K9EHJ, has resigned as Badger State Smoke Signals Advertising Manager.

That means, of course, that we need someone to assume those duties. If you're interested, contact Badger State Smoke

Signals Chairman Kenneth A. Ebnetter, K9EN, 822 Wauona Trail, Portage, WI 53901, or call Ken at 608/742-3560.

Our thanks to Harry for his hard work, and for a job well done. It is very much appreciated.



**JANUARY 4, 1983**

\*\*\*\*\*

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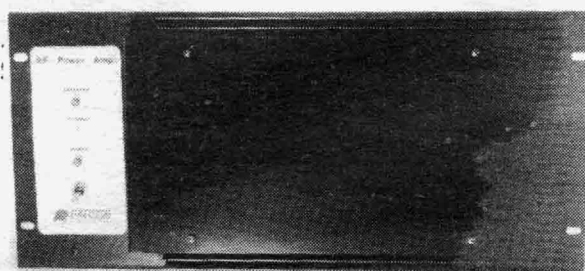
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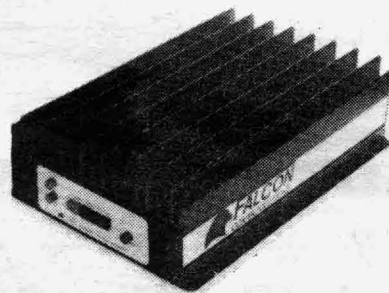
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## ..Due to a Tornado Warning..

**EDITOR'S NOTE:** While much of the following applies specifically to SKYWARN nets held on the Baraboo 146.88 repeater, the severe weather reporting criteria and some of the other information in this article are applicable to other amateur radio severe weather spotting networks as well.

Another winter is drawing to a close, and our thoughts must unfortunately turn to the impending season of severe weather. As coordinator of South-Central Wisconsin SKYWARN, I would like to briefly discuss operation of this year's net.

As in the past, the net will activate on the 146.28/.88 repeater. This machine occupies tower space graciously provided by WILV Radio (94.9 FM), high atop the Baraboo bluffs, providing coverage of more than 31,000 square miles. If the Baraboo machine goes down during a net, operations will transfer to the 147.75/.15 repeater, located on the WMTV (channel 15) tower in Madison.

All hams are encouraged to monitor the net during severe weather, and report local weather activity to the Net Control.

Reportable activity includes:

- \* Wind exceeding 50 mph (As a rule of thumb, this is when small branches and limbs begin to break from trees),
- \* Hail 0.75" dia. or larger,
- \* Obvious funnel clouds and tornado touchdowns,
- \* Very heavy rain, and
- \* Incessant lightning.

When reporting local activity, hams should initially identify themselves with their entire call. In the interest of efficiency, the Net Control may then respond with only the suffix, e.g., "XH, go ahead" or "XRAY HOTEL, go ahead." Reporting hams should also give their location relative to a well-known geographic landmark, e.g., "I-90 at the Wisconsin River."

Activity reported to the Net Control is simultaneously monitored by a liaison located at the National Weather Service (NWS) Office in Madison. The liaison apprises NWS radar operators of these surface reports, allowing more precise interpretation of the radar images. In return, the liaison informs the Net of rapidly changing weather conditions and statements provided by the NWS.

The Net will activate under either of two status levels during severe weather. Activation under FULL ALERT will occur whenever a severe thunderstorm or tornado warning is issued for any portion of south-central Wisconsin. During a full alert activation, only traffic related to the severe weather or other emergency traffic will be allowed, and all communications will pass through the Net Control.

Activation under a STAND-BY status may occur when severe weather is imminent but no warnings have yet been issued. While in stand-by status, the Net Control will allow routine informal traffic, however, stations should pause frequently to allow the Net Control to inform the Net of sudden changes in weather conditions.

I would like to thank those who have participated in the weather net in the past years. The purpose of the net is not only to provide severe weather information to the NWS, but also to the recreationists, travelers, and residents who monitor the Net. It is only through reports of those monitoring the Net that it can provide this useful information.

In conclusion, I would like to announce a new feature. Beginning Monday, March 6 at 6:30 p.m., and continuing each subsequent Monday evening through September, I will conduct an informal informational net on the 146.28/.88 repeater. The purposes will be to inform participants about the weather net, correct problems which crop up during activation of formal nets, and provide a forum for discussion concerning topics of other interest to net participants. I hope these informal nets are the only activations we see this year.

- John Offerdahl, KC9XH  
Special Emergency Coordinator,  
Severe Weather Operations/146.88



## The BSSS No-Code Survey

The average of radio amateurs in the United States is just under 50, and it is increasing; young people are not joining the hobby as they once were. This has been the cause of some concern, and it has been suggested that having to learn the code is one of the reasons that young people are not becoming radio amateurs. This has led to speculation that a no-code amateur license might reverse the "aging amateur" trend. We're interested in our readers' opinions, so at right is the survey form for the BSSS no-code survey.

This survey is not scientific in any way, but is simply a sampling of our readers' opinions and ideas about the possible effects of a no-code amateur radio license, if such a license is adopted. Please note that both licensed amateurs and non-licensed persons are invited to respond.

We will publish a summary of responses in our May or June issue, and responses should be received here no later than April 15.

As noted at the bottom of the survey form, please fill in the blanks indicating who you are, etc. That information will NOT be published in our summary of the results, but will help us if we need to contact you for additional information or clarification regarding your responses.

If you have comments or ideas about a no-code license which require more room than the blank provides, please use a separate sheet of paper.

Send the completed form to Badger State Smoke Signals, 412 1/2 Ash Street, Baraboo, WI 53913.

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# Badger State Smoke Signals No-Code Survey Form

1. Would a no-code license lead to the end of Amateur Radio as we know it?

Yes \_\_\_\_ No \_\_\_\_

2. Would a no-code license attract more unqualified, unmotivated people to the Amateur Radio ranks than those who are qualified and motivated?

Yes \_\_\_\_ No \_\_\_\_

3. Do you feel that most Hams who use the code do so because they enjoy using it?

Yes \_\_\_\_ No \_\_\_\_

4. Do you feel that proficiency in code separates the "men from the boys"?

Yes \_\_\_\_ No \_\_\_\_

5. Should knowledge of the code be required only for those Amateurs who have a special interest in its use?

Yes \_\_\_\_ No \_\_\_\_

6. If a no-code license is approved and becomes a reality, should those operators' privileges be limited to the VHF or UHF bands?

Yes \_\_\_\_ No \_\_\_\_

7. If you are a licensed Radio Amateur, do you operate CW (code)?

Yes \_\_\_\_ No \_\_\_\_

8. If you do operate CW, approximately how much of your operating time is spent on CW?

\_\_\_\_ %

9. If you operate CW, what is your present code speed?

\_\_\_\_ words per minute.

10. If you are a licensed Radio Amateur, do you know anyone who would, in your opinion, be qualified to be an Amateur - and would probably be an Amateur - but is not willing or able to learn the code?

Yes \_\_\_\_ No \_\_\_\_

11. If you are NOT a licensed Radio Amateur, but would like to be, is the having to learn the code the PRIMARY reason you have not made the effort to become licensed?

Yes \_\_\_\_ No \_\_\_\_

12. Do you feel that a no-code license will increase the number of Radio Amateurs, particularly young people?

Yes \_\_\_\_ No \_\_\_\_

13. Is a no-code license the best way to increase the number of Amateurs, particularly young people?

Yes \_\_\_\_ No \_\_\_\_

14. If your answer to question 13 is no, what do you think would be a better way to increase the number of Amateurs, particularly young people?

\_\_\_\_\_  
\_\_\_\_\_

Please use a separate sheet of paper, if necessary.

Please fill in the following blanks. The information will NOT be published in our summary of the survey, unless you specify otherwise. The summary will be published in May or June, 1989. Thank you for taking the time to participate!

PLEASE PRINT

Name: \_\_\_\_\_

Call Sign: \_\_\_\_\_

Address: \_\_\_\_\_

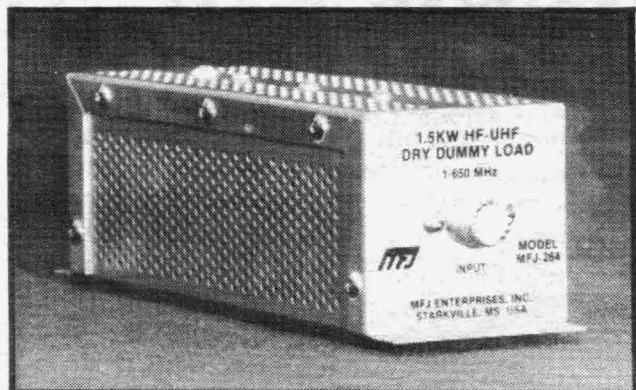
City: \_\_\_\_\_

State: \_\_\_\_\_ ZIP: \_\_\_\_\_

If unlicensed, check here: \_\_\_\_\_

Send completed survey form to Badger State Smoke Signals, 412 1/2 Ash Street, Baraboo, WI 53913.

## New Products



**MFJ-264 1.5 KW DUMMY LOAD**

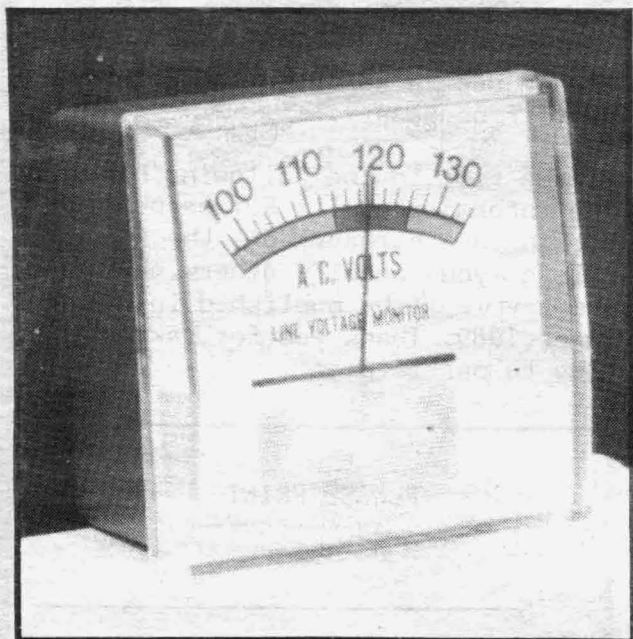
MFJ Enterprises, Inc. announces the release of a new 1.5 KW UHF/VHF/HF "dry" dummy load for \$109.95.

This new dummy load - an MFJ first - lets you tune up to 650 MHz and get extremely low SWR.

It handles 100 watts for 10 minutes, 1500 watts for 10 seconds. The voltage gradient is 10 KV/inch.

SWR is extremely low: 1.1:1 at 30 MHz, below 1.3:1 to 650 MHz. The MFJ-264 is usable to 750 MHz. It measures 3 x 3 x 7 inches, and comes with MFJ's one-year unconditional guarantee.

- MFJ news release



**MFJ-850 AC LINE VOLTAGE MONITOR**

The new MFJ-850 is the easiest protection you can get against low voltage "brown-out" conditions that can damage your expensive electrical equipment.

All you have to do is plug it in and it tells you at a glance when your line voltage is at a low "brown-out" level. The expanded scale reads from 95-135 volts. Color coding makes across the room reading easy.

Just plug it into any AC outlet for

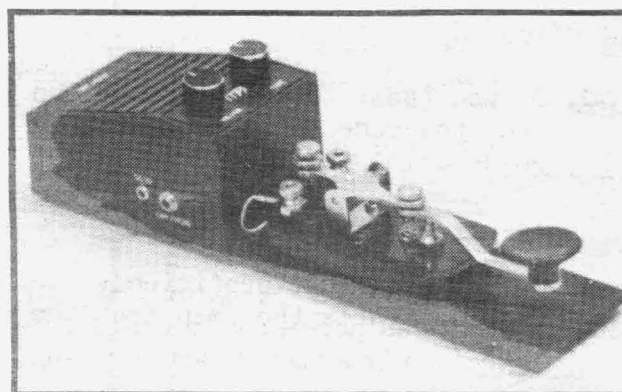
plus/minus 2% accuracy along the entire expanded scale.

You can leave it plugged in permanently for constant monitoring - it comes with MFJ's one-year unconditional guarantee.

It measures a compact 2 1/4 x 2 1/4 x 1 1/2 inches. You can use it anywhere - around the house, in your ham shack, on your boat, or in your RV - or use it to check your valuable computer/peripheral or video setup.

It is especially useful for checking portable generators and all kinds of temporary electrical setups.

- MFJ news release



**MFJ-557 DELUXE  
CODE PRACTICE OSCILLATOR**

MFJ Enterprises, Inc. announces the release of its new MFJ-557 Deluxe Code Practice Oscillator for \$24.95.

It features a straight Morse key and a code oscillator with a built-in speaker - mounted together on a non-skid heavy steel base that stays put on your table.

It lets you practice sending code at home, work, riding in your car - practically anywhere - because it's so easy to take it along where ever you go.

A volume control lets you adjust it from barely audible to blaring full sound. You can practice your code without bothering anyone. A tone control gives you a wide tone adjustment - from high "squeaky" to low "booming" tones.

You even get an earphone jack for private listening.

It runs on a 9-volt battery (not included) or 110 VAC with an optional power supply (\$9.95) that plugs into a jack on the side of the MFJ-557.

The straight key features screw-adjustable contacts and can be hooked to your transmitter and used for sending code over the air.

This attractive unit is black and measures 8 1/2 x 2 1/4 x 3 3/4 inches. It comes with MFJ's one year unconditional guarantee.

For more information about the MFJ-557, or any MFJ product, contact any MFJ dealer or MFJ Enterprises, Inc., P.O. Box 494, Mississippi State, MS 39762, or call (601) 323-5869; FAX (601) 323-6551; or Telex 53 4590 MFJ STKV. Orders may be

telephoned toll-free to (800) 647-1800.

- MFJ news release

## ICOM AH-3 AUTOMATIC ANTENNA TUNER

ICOM is proud to announce the fully automatic AH-3 HF antenna tuner. The new AH-3 enables you to tune in the world as it matches any frequency in the amateur band. The AH-3 features:

\* **FULL AUTOMATIC TUNING.** The AH-3 is designed for use with ICOM HF transceivers. Just push the tuner switch on the IC-725 transceiver and the AH-3 adjusts immediately to the minimum SWR. Average tune-up time is less than 2.5 seconds!

\* **MEMORY CHANNELS FOR QUICK TUNING.** Eight convenient memories store settings for minimum SWR. Retuning to memorized frequency takes only one second!

\* **DURABLE AND WEATHER RESISTANT.** The AH-3 is housed in a durable weather resistant acrylic case and sealed with rubber gaskets. Ready to mount anywhere, even outdoors.

\* **LOW POWER TUNE-UP.** The AH-3 emits only 300 mW power output during tune-up, eliminating interference to other stations.

\* **SIMPLE INSTALLATION.** The AH-3 installs easily. No adjustments are necessary. Just connect the control and antenna cables.

Additionally, the AH-3 is ideal for HF mobile operation. The AH-3 installs easily in your trunk and, because it tunes automatically, it doesn't impair driving. The optional AH-2b antenna element is available for mobile operation. The AH-2b includes a sturdy bumper mount system for holding a 2.5M (8.2 ft.) stainless steel antenna element. The AH-3 and AH-2b system allows you 3.5 to 28 MHz mobile operation.

The AH-3 is currently available. Suggested retail price is \$489.00.

- ICOM news release

## ICOM UI-7 FM MODULE FOR IC-725; CP-11 NOISE REDUCING POWER CORD

The UI-7 module for the ultra-compact IC-725 HF transceiver is now available. The UI-7 is an FM module which allows FM transmit with the IC-725. Suggested retail price is \$71.99.

The CP-11 is also available. It is a cigarette lighter power cord which has a built-in noise reduction filter to cut down on ignition noise problems common with newer computer-controlled vehicles. Suggested retail price is \$18.99.

- ICOM news release



# Correspondence

## From Our Readers

### HIGH CLASS CBERS?

To the editor:

498,790 amateurs took the Morse code test. Now, sure as heck, the "brain children" of today can pass 5 WPM. What's the beef??!! I took my General six times to get the license; that was 13 WPM. Kids today want things right now.

I'll bet if you put it up to a vote, the 498,790 would vote for the test.

It is the Japanese radio manufacturers that want the code out so more radios can be sold. If you will notice the ads are selling buy two and get one free.

Let's keep the code test; I did it, so can the newcomers. We could turn out to be high class CBers (if a code-free license is adopted).

Edward Malinowski, KA9MVG  
Advanced Class  
Vice-President, M.A.A.R.S.  
Loyal, WI 54446

### WATCHING THE CANADIAN NO-CODE EXPERIMENT

I find it annoying that the no-code issue has been resurrected again, and that we are spending time listening to yet another replay of the same arguments that were presented in the past. Let me make it very clear that I like the amateur radio hobby pretty much the way it is. If anything, I'd like to see it get better, not necessarily bigger, and that I strongly favor Morse code as part of the licensing requirement.

I propose the following solution to end the latest no-code debate which seems to be so fervently pursued largely by those forces who would like to sell more products, more subscriptions, and more services to the amateur community.

Our neighbor, Canada, has recently adopted some form of no-code. Canadian amateur radio is very similar to U.S. amateur radio. I propose that we wait at least five years, or however long it might take, to draw some clear conclusions on the impact of no-code on the Canadian amateur radio service.

At the end of that period, we might find that the Canadian decision accomplishes all of the good things that our no-code proponents promise -- more new hams, more trained operators with advanced skills and knowledge, a higher quality hobby and service. If this should be true, we can proceed with a thorough study of how we might implement a similar plan.

Or, we might find that the Canadian decision simply lured some loonies into the Canadian amateur service and degenerated that service into the bedlam of CB. If this

should be true, we can be grateful for not having made the same devastating mistake.

Amateur radio took about 100 years to evolve into what it is today. Watching the Canadian experiment for five years probably won't hurt anything but commercial interests.

- Richard Steck, W9RS  
Lake Forest, IL

### A NEW CONCEPT - ADDAM IS REVOLUTIONARY!

Dear Jim,

Our laboratory has done it again; this new idea will solve the problem of our crowded voice bands. One of our engineers, formerly with the C&NW and B&O was reading about CD and digital tape concepts and figured there should be a way to use this on the amateur bands.

So, as we all know, CW requires very little bandwidth; why not use an A/D (analog to digital) converter, and send our signals out on CW or pulse modulation? At the receiver, with a D/A (digital to analog) converter, we now have perfect audio reproduction.

After some experimentation, it was found that it was necessary to add a couple of extra controls to the system to perfect the results.

The first control was a PLC, or pulse limiting control, to prevent tilt and overshoot from causing splatter from distortion. The second control, a PWC, or pulse width control, is to keep bandwidth to a minimum and prevent overheating of final amplifiers due to greater duty cycle.

We are now in contact with several manufacturers who are eager to get the patent rights to this new modulation system. They feel that the addition of two small boards, the A/D and D/A circuits, plus two additional controls on an already crowded panel, can be worked out.

So, before long, you will be able to purchase a transceiver with ADDAM already installed, and others will be on the market with conversion kits, and we will have relief from the melee that now exists on our voice frequencies.

If there is any QRM, I am sure we can come up with some form of synchronous detection to alleviate a great deal of this type of interference.

Anyone wanting more information on this system can write to P.O. Box APR-1, Foeyonu, Japan, ZIP 00UP2.

Syonara,

Vrah Remah, J8XGN+1

### QuickKit™ G5RV & All-Band Loop Kits

<ul style="list-style-type: none"> <li>Fast &amp; Easy to Build</li> <li>Failsafe visual instructions</li> <li>No measuring or cutting</li> <li>Everything included</li> <li>Finish antenna in minutes</li> </ul>	<ul style="list-style-type: none"> <li>Full Size G5RV \$34.95</li> <li>dipole coverage 80-10</li> <li>Half Size G5RV \$24.95</li> <li>dipole coverage 40-10</li> <li>Quarter Size G5RV \$19.95</li> <li>dipole coverage 20-10</li> <li>Marconi Adapter kit \$ 4.95</li> <li>QuickLoops: quad, diamond, delta, horiz. vert. sloping</li> <li>160-10m (570') \$99.95</li> <li>80-10m (290') \$79.95</li> <li>40-10m (142') \$64.95</li> <li>200' Dacron 250# line \$11.95</li> </ul>
<ul style="list-style-type: none"> <li>Quality Components</li> <li>Presoldered Coax Fittings</li> <li>Kinkproof Superflex wire</li> <li>Fully insulated, wx sealed, no-corrode, low noise design</li> </ul>	
<p>Fastest Antennas in the West</p> <p><b>Antennas West</b></p> <p>Add \$5 S&amp;H</p> <p>(801) 373-8425</p>	<p>Box 50062-SS, Provo, UT 84605</p>



## HERE and THERE

THE MADISON AREA REPEATER ASSOCIATION held a meeting March 13. Because of the death in February of MARA President Clyde Downing, W9HSY, an election of officers was held, with the following results:

President: Jim Waldorf, KB9AQQ  
Vice-President: Steve Polishinski, WB9-YSD

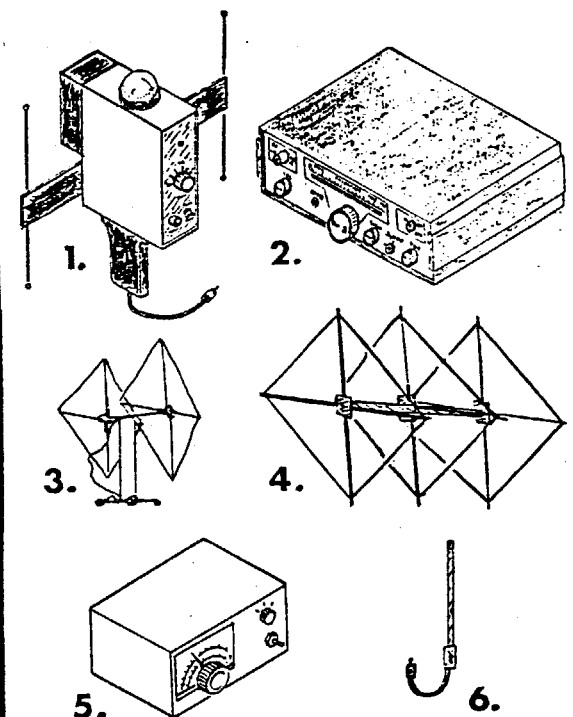
Secretary: Gary Muskat, N9DRA  
Treasurer: Bob O'Conner, WD9HEX

MARA operates two 2-meter repeaters in Madison, 146.16/146.76 and 147.75/-147.15. Talkin for the Madison Swapfest will be on 147.15.

## Silent Keys

Jack Moore KC9QD Park Falls, WI  
(Thanks W9ZAG)

## RF PRODUCTS



1. VHF DIRECTION FINDERS \$124.95
2. O'SCOPE SPEC. ANLY'SR \$795.00
3. 2-MTR PORTABLE QUAD \$ 73.95
4. FIXED VHF QUAD ANTS. \$ 73.95
5. O'SCOPE RANGE EXTN'DR \$ 69.50
6. 2MTR PORTABLE J ANT. \$ 29.95

CALL/WRITE FOR DATA - SHIPPING AND CA TAX EXTRA

### RADIO ENGINEERS

3941 MT. BRUNDAGE AVE.  
SAN DIEGO CA. 92111  
619-565-1319



# Top Band from Mellish Reef and Willis Island

By David J. Schmocker, KJ9I  
N7263 CTH F, Oconomowoc, WI 53066-9020

(Editor's note: Dave was the 160 meter operator on a DXpedition to Mellish Reef (VK9ZM) and Willis Island (VK9ZW). Herewith he shares some of his experiences from that DXpedition.)

We came very close to stranding two hams and our boat engineer during the initial landing attempt at Mellish Reef.

The three of them left from the Auriga Bay in the dinghy, armed with a tent, hammer, and five gallons of fresh water (no food - after four days and four nights on a fifty foot boat, we wanted off. Perhaps we were a bit over-anxious to hear the pileups!)

As they crossed the coral reef to head for the cay, the waves slammed them into coral, breaking off two of the three blades on the outboard motor's propellor. Once inside the reef, the calm seas allowed them to land safely. But when they tried to return to the mother boat, they lacked enough thrust to overcome the large waves outside the reef wall.

Lucky for us, the winds changed so that we could go around the reef to a much safer, shorter landing path to the cay. The dinghy was able to reach the Auriga Bay.

Our boat engineer was extremely handy, also. After the pull-start cord pulled out of its grip and recoiled inside the motor, and the throttle mechanism broke, Steve disassembled the motor to retract the cord, and he jerry-rigged a vice-grip pliers as a workable throttle control. He jerry-rigged an old propellor with a damaged rubber insert and mounted it to the shaft by melting lead! This restored the dinghy to operable condition so we could continue with the expedition.

## 160 FROM MELLISH REEF/VK9ZM

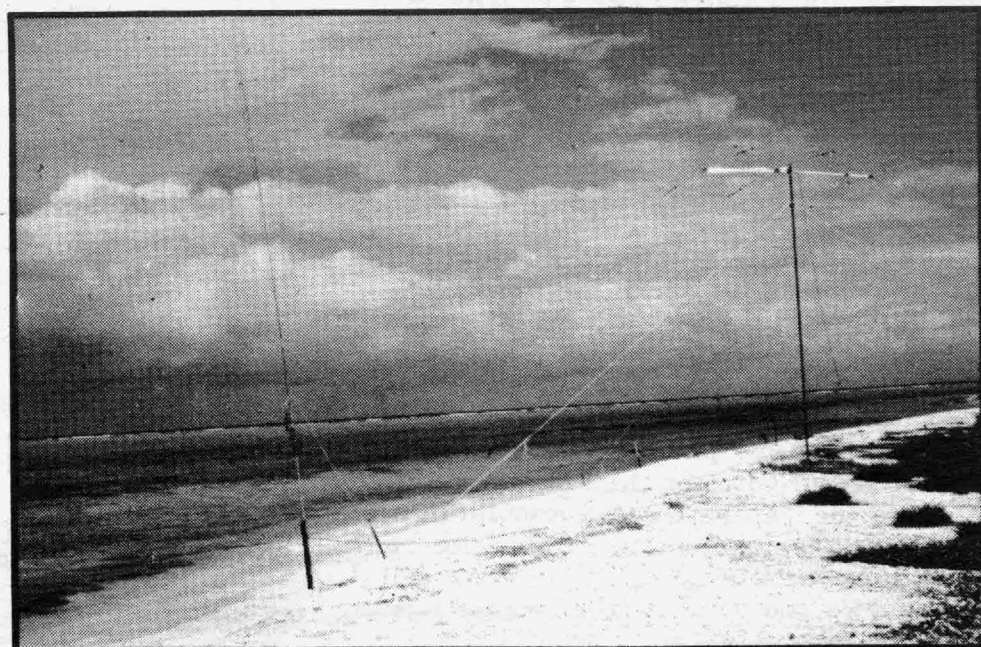
The first 160 meter antenna erected was an inverted vee up 5 meters. It was attached to one of the tribander masts. I worked both KX6DC and KX6DS, VK9NS, KH2D, KG6DX, and some other "locals." Then I nearly fell from my chair when I heard and worked WØZV and WB9Z! I was able to work several other WØs and W9s during an opening about midway between my sunset and the midwestern USA sunrise.

Putting up the Minooka (a miniature bazooka - 48 foot top-loaded vertical for 160M) was the next goal. With very windy conditions on Mellish Reef, we attempted to erect the Minooka. We were adding the final section when the whole antenna came crashing down to the ground. The PVC loading coil connection had broken (conductor still intact) and five of the aluminum sections were bent.

The next day, NM2L and I tried to repair the broken PVC with epoxy. This failed, so we made a bamboo splint to hold the connection together for the expedition. We sledge hammered the bent sections so they would fit together, and we did "Minooka - take II." Extreme patience and care, combined with slightly reduced winds, led to success. NM2L, JR1RCQ, VE3CPU, ZF2KN, and VE3IEO helped me with the antenna (Thanks). I ran a number of radials into the Coral Sea, and tied them to rocks and coral to keep them in the water throughout the changing tide.

I was QRV on 160 meters all nights except the 14th, when the Minooka was needed for 80/75 meter use. On top band, I worked WØs, W9s, W7s, W6s, and few other North Americans. Please understand that it was mid-summer there, and I was bathed in static crashes of 59+20 dB! Receiving was very difficult, even on the inverted vee and with a loop antenna/preamplifier. It was most frustrating: I could hear W stations calling, but couldn't get even one letter of their call signs. I requested USA to call me spread out from 1.832 to 1.837 several times, with no positive response. I also tried asking for QRQ so I could copy a couple consecutive letters between static crashes.

I worked several Indonesian stations, including YB8AX/Ø and



Some of the Mellish Reef/VK9ZM antennas are shown here: an HF6V and one tribander.



A view of the beach at Mellish Reef - note the profusion of birds.



Here are two birds, known as "Boobies", on Mellish Reef. That's a boobie and a boobie baby - or is it a baby boobie - in the foreground. - Photos courtesy Dave Schmocker, KJ9I



YBØARA. I also worked many Japanese hams, who I had to ask to QRX until after the North American sunrise. I replied to VS6DO's CQ, but could not raise him! VU2-DVP asked for a sked. I listened at 1.845 and heard him 59+10 dB, but he couldn't hear me! I also worked V85MM (K1MM) and two FK8s.

We took the Minooka down the last day on Mellish Reef and packed up all gear to set sail for Willis Island.

After 50 more hours on the Auriga Bay, we arrived at Willis Island.

#### WORKING 160 FROM WILLIS/VK9ZW

As we approached the island, we were overjoyed to see three tall towers and many attached long wire antennas on the island. We became frustrated to learn that we could not use any of them! Our landing permission for Willis Island was contingent on NOT imposing on the four residents (meteorological people stationed on the island).

This meant that we erected our own tents adjacent to their nicely-equipped buildings, our own antenna supports and antennae next to theirs, etc.

The operators decided that for our short four-day operation, we could not justify spending the man-hours needed to re-erect the Minooka on Willis Island. Therefore, we sought other solutions. After consulting with the residents, we settled on a full-size quarterwave vertical antenna, to be supported by a balloon such as the ones launched four times daily to collect meteorological data.

I cut 130 feet of #16 wire, and attached top and bottom insulators for the launch. NM2L had brought a 1 KW antenna tuner, which we would use to flatten the

VSWR. I converted the half-wave inverted vee from Mellish into two quarter-wave radials, and oriented them (not by accident!) toward North America.

Despite the uncooperative wind, we launched the antenna two hours before sunset. The antenna leaned about 20 degrees from perfectly vertical toward about 285 degrees West-Northwest. I instantly rushed to tune the tuner and prepare for a productive night on 160.

One hour before sunset, the balloon exploded and the antenna fell to the ground. I looked on, discouraged.

The residents concluded that sunlight can heat the balloon contents, expanding the balloon and stressing its membrane-like thin wall.

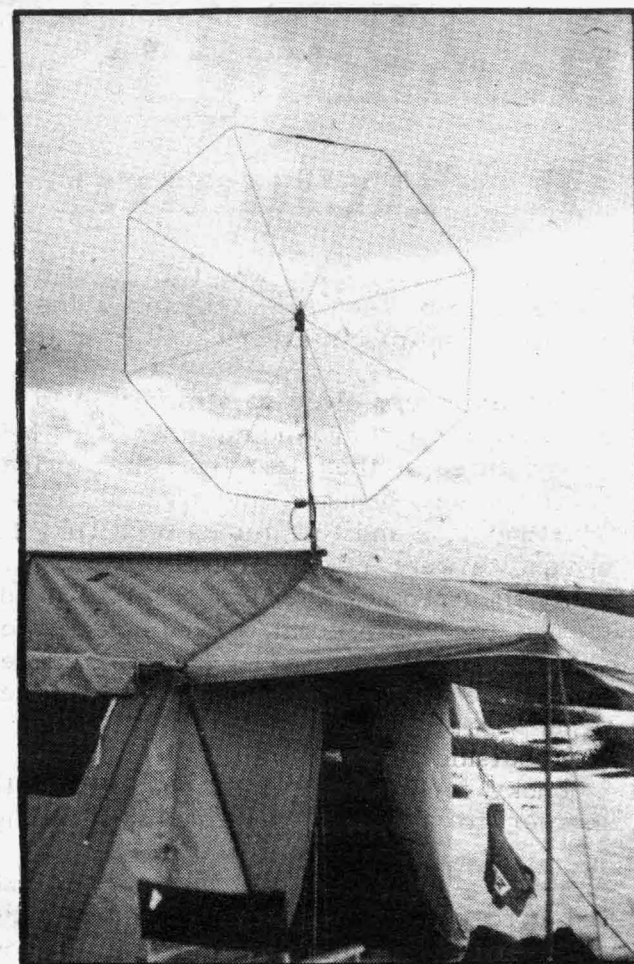
"Sometimes they last hours and sometimes weeks," said Peter, of the Willis Island meteorological staff.

He agreed to try the launch again the following evening.

Winds were unchanged the next night. We waited until the sun was just below the horizon to try again. It flew, and we tuned it. It still leaned as before, but there are certain things over which we had no control, the wind being one.

I started operating immediately, knowing that each QSO might be the last one. I worked many of the same Pacific stations, and I encountered an immediate JA pileup. As before, I asked them to QRX until the North American sunrise had passed.

For some reason(s) (a change in propagation?), I had even more difficulty copying North American stations. The Japanese stations which were 559 at Mellish Reef were now 599! I worked stations on 1.832 MHz to 1.837 MHz until about 1600Z, when I listened for Japanese hams. I worked 84 JAs of the total 141 QSOs that night.



Here is the 160 meter receiving loop antenna on operating tent #2 on Mellish Reef.

About two hours before my sunrise, I worked five UA9 stations, two UA6s, four YUs, and an SP! This was an exciting night from VK9ZW.

The balloon lasted three hours into daylight, and then it fell to the ground. VK9ZW went QRT on 160 until the next DXpedition. □

## No-Code License Under Study By ARRL Committee

(Continued from front page)

Novice Enhancement proved to be successful in several ways. On-the-air activity of Novices and Technicians increased dramatically. Upgrading and the rate of license renewal by Novices both surged upward. Novice Enhancement also motivated some people to clear the licensing hurdles who previously had not wanted to make the effort; however, in the first 18 months of Novice Enhancement, the numbers of licensees did not increase as much as had been hoped. The FCC decision to reallocate 220-222 MHz (the fight for which is far from over!) caused many amateurs to attribute new significance to the issue of growth. This, coupled with widespread publicity about the expected phasing out of

Morse code in the maritime service, suggested that the time may have come for another look at entry-level requirements.

Last November, ARRL President Larry Price, W4RA, and Executive Vice President of the ARRL David Sumner, K1ZZ, collaborated on preparation of an editorial for the January issue of *QST* entitled "Why Morse Code?" The editorial called for a rational discussion, within the democratic framework provided by the League, of the no-code license issue. Advance copies of the editorial were distributed at the December 10 meeting of the Executive Committee. Subsequent discussion led the Executive Committee to instruct President Price to appoint a special study committee, made up of representatives from the Board, the amateur community at large, and the Amateur Radio industry, to explore the implications of a no-code class of amateur license.

The study committee was appointed January 9, under the chairmanship of Vice President George Wilson, W4OYL, and immediately began its work by correspondence. Several committee members were present at the Florida State Convention (Miami Hamboree) the weekend of February

4, and were able to attend meetings of the informal industry group which has been discussing the issue of Amateur Radio growth for the past four years, as well as to get together themselves. The first formal meeting of the study committee is slated for March 11.

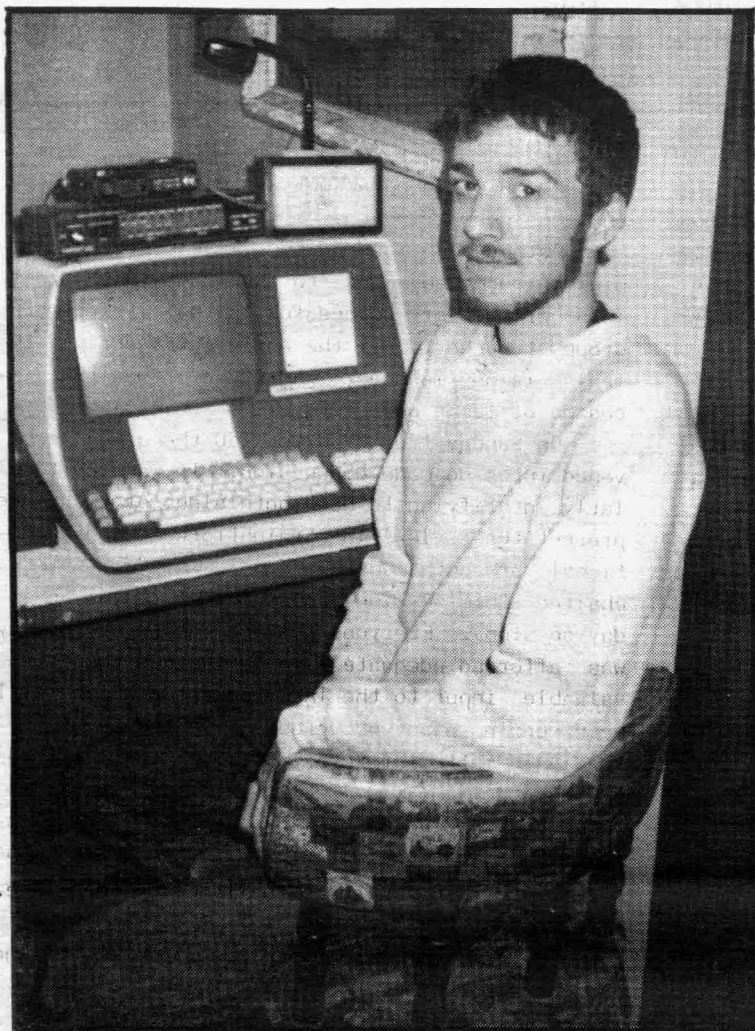
Between now and June, the study committee will be developing a report for the Board to consider at its July meeting. The report may or may not include a recommended League position. The Board may or may not accept such a recommendation. ARRL policy will be whatever eventually garners the support of a majority of ARRL Directors. There's no way anyone can know at this time what that will be.

In the meantime, a reasonable statement of ARRL policy that reflects the Executive Committee's December 10 action is that the subject deserves careful study over the next several months. Any member wishing to provide an input to that study should be encouraged to address the study committee members, either individually or c/o ARRL Headquarters, 225 Main Street, Newington, CT 06111, as well as their own Director.

- The ARRL Letter



## Hamming it up in Fitchburg



GREG ZIER, KA9VDU



THE KA9VDU 444.000 MHZ REPEATER



DAN ZIER, KB9BNU

The average age of Radio Amateurs today is around 50 years old, but two Fitchburg (south of Madison) Hams have brought that average down just a bit.

Greg Zier (KA9VDU) and younger brother Dan (KB9BNU) are in their teens, and both are enjoying Ham Radio.

Greg became interested in the hobby in his freshman year at Madison West High School, where Bill Manke, KB9NG, is advisor to the school's radio club. He passed his Novice examination in December, 1985, when he was 15. His license arrived April 1, 1986, and he has been KA9VDU since that time. He upgraded to General on August 5, 1986.

The Ziers bought their first Ham equipment when their neighbor, Dick, KC9RA, sold Greg's folks a 1966 Heathkit SB-301 receiver and an SB-401 transmitter. Their first antenna was an 80-meter end-fed, laying on the porch roof outside a window; it was later hung from an overhang, and eventually it was strung to a basketball pole. Later, a borrowed vertical was installed.

In the fall of 1986, Greg added a Yaesu FT-203R hand-held, and then a Kenwood TM-201B, powered by a marine battery; the battery was later replaced by an Astron RS-20A power supply.

After becoming interested in digital modes, Greg got an AEA PK-232 Terminal Node Controller (TNC). The TNC was connected to a Commodore home computer, which was later replaced with an Advanced Digital Data Systems Genesis 200 Smart Terminal, which has provided a lot of fun and lots of use. The KA9VDU 2-meter packet station is on 24 hours a day for digipeating on 145.070 MHz, with a pair of Cushcraft A147-11s up 35 feet aimed toward Chicago.

Greg became interested in repeaters, and decided to try building his own from a kit. He bought a Hamtronics kit repeater in June, 1988. It operates on 444.000, running two watts through a pair of Celwave model 638 duplexers into a 1/4 wave antenna at the present time. It's run by an E.F. Johnson power supply, and is just a spare-time project which still requires a fair amount of work. Giving Greg a helping hand with the repeater were Pat, KD9UU; Kurt, NG9C; Paul, WA9PWP; and Bryan, N9GBJ.

Greg became interested in 440 after his father (Ray, KA9YHN) got his Technician and bought a Yaesu FT-727R dual-band HT. Greg got a Yaesu FT-703R HT in the fall of 1988. Greg and Ray can be found occasionally on the KD9UU repeater on 443.675.

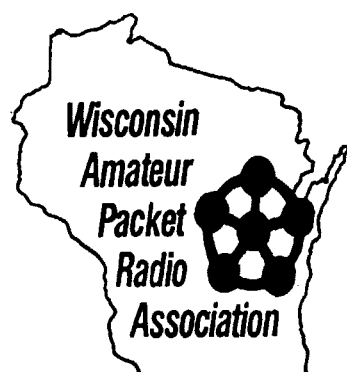
Dan, KB9BNU, passed his Novice August 27, 1988, and has an FT-23R for listening. He plans to upgrade in the fall of this year.

Out of a family of 5, Greg's mother and his married sister are not Radio Amateurs. But, hey, 60% isn't a bad percentage!

Greg's mother IS interested in Ham Radio, though; the percentage may just become 80.

□





# THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association (WAPRA)

c/o CARL SCHUMACHER, N9BYS  
7740 EVERGREEN TERRACE  
BURLINGTON, WI 53106

Steve Loeffler, WB9ZRE, Editor, 123 W. Oshkosh St., Ripon, WI 54971

1989 RiverLAN Spring Packet Conference - April 15

The Spring RiverLAN Packet Conference will provide an opportunity for all regional packet operators to get updated on the latest in what is happening with packet radio. The April 15 conference will be held at Watlow Controls, 1241 Bundy Blvd., Winona, Minnesota. Watlow Controls is located 25 miles north of La Crosse, Wisconsin on Highway 61/14, 1/2 mile south of the Highway 43 junction. Pre-conference activities begin at 9:00 a.m. with a coffee get-together and the RiverLAN business meeting at 9:30 a.m. The conference will begin at 10:00 a.m. with events including:

**AMSAT Microsat Satellites:** A discussion of the onboard PACSAT applications on the four new satellites to be launched as early as July, 1989. **Ralph Wallio - WORPK** is the retired Vice President of Operations for AMSAT and will discuss the capabilities of these satellites, including their packet radio BBS use.

**Interfacing Packet with NTS:** Gerald Wallen - K9EP, Wisconsin ARRL STM, discusses this timely topic. The greater reliance on packet radio for NTS messages has created some problems. Ideas on resolution of some of these difficulties are needed.

**Future of Packet - Where From Here:** Round-table/panel discussion on the direction we should take in planning for packet radio in the upper midwest. What systems are needed? What projects should we begin planning for? A lively discussion should help resolve some of these questions.

**NEW USERS Forum:** For persons considering or just starting out in packet radio. An opportunity to get the straight facts about packet radio, answers to your questions and operating tips.

A \$6.00 registration fee includes the cost of coffee and lunch. Please confirm your registration to: Dan McKenzie - WCOV, 517 South 4th Street, La Crosse, Minnesota 55947 or via packet to W9LZQ @ W9LZQ on or before April 8.

(Due to the publication date of BSSS, if this newsletter has reached you after the April 8 registration, the registration fee will also be collected at the door on April 15. - ED).

## ICOM 02/03/04 & Vox Unit Combo for Packet

The ICOM family of hand-held radios (02/03/04 AT) are well suited for packet radio given the many available power supply options. The big problem is getting the PTT to operate "CLEANLY" while not compromising the audio level from the TNC when using the resistor or resistor/capacitor interfaces suggested in some

manuals.

I am using the ICOM HS10-SA Vox unit to interface the ICOM 02/04 AT. It has worked well most of the time, but I was always plagued with a minimum 200 msec transmit "hang" delay until I tore it apart for examination and correction.

The small "delay" pot on the front of the unit is in series with a 2.2 megohm resistor (R-19 on the board). The adjustable pot is also about 2 megohms and this combination allows a MINIMUM VOX "hang" transmit delay of 200 msec. By identifying the solder connections for R-19 on the back of the PC board and placing a low value resistor (or jumper) in parallel, I was able to achieve a ZERO "hang" transmit delay time with the delay pot in the FULLCOUNTER-CLOCKWISE position.

Harold - N4KWB

## Annual TAPR Meeting Report

The 7th annual Tucson Amateur Packet Radio general membership meeting was held in Tucson on Saturday and Sunday, February 25th/26th.

On the Friday night before the meeting we met at Peter Pipers Pizza place with TAPR hosting the pizza and soft drinks. This Friday night get together has become a popular social occasion for the folks attending the annual meeting. Following the pizza bash the annual TAPR Malibu Gran Prix races were held. I never did get the final results as to who won, but I'm sure that if the winner reads Hamnet Section 9 he'll let us know.

The members elected by the membership to fill the 5 Board of Directors seats were: Franklin Antonio - N6NKF, Bdale Garbee - N3EUA, Steve Goode - K9NG, Eric Gustafson - N7CL and Lyle Johnson - WA7GXD.

The officers elected by the board were: President, Andy Freeborn - NOCCZ; Executive Vice President, Pete Eaton - WB9FLW; Secretary, Dave Toth - VE3GYQ; and Treasurer, Bdale Garbee - N3EUA. The Editor of Packet Status Register continues to be Scott Loftness - W3VS, your Hamnet SysOp.

The speakers were the usual movers and shakers from within the amateur digital and RF community; Tom Clark - W3IWI, on Microsat RF development; Phil Karn - KA9Q, on TCP/IP update; Greg Jones - WD5IVD, on Texnet; Harold Price - NK6K, on Microsat software; Dave Toth - VE3GYQ, on HF networking; Eric Gustafson - N7CL, on TAPR DCD mods and TNC1 mod; Bdale Garbee - N3EUA, on high speed networking; Mike Chepponis - K3MC, on high speed I/O for the PC; Dan Morrison - KV7B, on HF AFSK experiments; Jim Vogeler - WA7CJO, RF at microwave frequencies. Lyle Johnson - WA7GXD

was scheduled to speak but was out of the country on a business trip.

Both lunch and dinner were served in a dining room adjacent to the conference room. This proved very successful in that it kept the group together. If the audio level during the meals is any measure, there was a healthy exchange of ideas and views.

On Sunday from 0900 to 1230 the group reconvened for a no-code discussion. It was particularly gratifying to hear both sides of the issue present their views in straightforward and unemotional presentations. Harold Price - NK6K, chaired this session (he also chaired the Saturday session). Everyone that had anything to say was afforded adequate time. The end result was valuable input to the TAPR committee which will be preparing a no-code proposal to the League.

As a matter of interest, on Saturday at the beginning of the meeting I did a quick survey of those present and found that there were 35 that favored a no-code initiative, 13 that were opposed, and 7 that were on the fence on the issue. (There were about 20 missing from the room at the time as the total attendance was 75). At the end of the Sunday session many folks had already left to catch their flights. Nevertheless there were 4 of those who had indicated opposition on Saturday still present. Of those four still present three of them indicated that they were now leaning towards being on the fence.

The Board of Directors met all day Friday and again on Saturday night after dinner. Ron Raikes - W8DED, made a presentation to the board on Friday afternoon. Following Rons comments the board elected to forward the WA6IGY NET/ROM-TheNet comparison study to Nord<<Link for their comments/response.

Dave Toth - VE3GYQ, as the new TAPR Secretary will provide a summary of the board deliberations for publication in the May issue of PSR. The TAPR 1988 Income Statement as presented to the membership will also appear in that issue.

Kits for the DCD mods and the TNC1 upgrade will soon go into production and we hope to have some for Dayton. -- Andy - NOCCZ

## Daffynition

**TWEAKER:** twee ker n. 1: Most dangerous weapon in the arsenal of man. 2: Screwdriver with a 3/32-inch blade size and a green handle frequently found in motion without any evidence of law. 3: Controlling force behind same, with or without evidence of intelligence. 4: Job security for qualified technicians. **TWEAKER** v. One who tweaks.



## WISCONSIN PACKET DIGI/NODE/BBS LISTING

CALL	ALIAS	LOCATION	TYPE	COMMENTS	FREQ.
N0ELB-1	WIBFD	Bayfield	Node(1)		145.01
KA9JDE	BVD	Beaver Dam	Digi		145.01
W0AIH	EAU	Brackett	Digi		145.01
N9BYS	BUR	Burlington	Digi/PBBS	RLI V9.00	145.09
N9BBQ-9	#MTT	Burlington	Node(2)		223.42
WD9DHI-8	#DHIB	Burlington	Node(2)		446.10
WD9DHI-9	DHIL	Burlington	Node(2)		145.09
WD9DHI-7	DHIC	Cedarburg	Node(2)		145.09
W8CDZ-1	CMX	Calumet, MI	Digi		145.01
WD9DHI-7	DHIC	Cedarburg	Node(2)		145.09
N9AW	CUD	Cudahy	Digi/PBBS	C-64	145.09
WB8CHJ-2	IRN	Crystal Falls, MI	Node(2)		145.01
KD9UU-9	DAR	Darlington	Node(1)	(Beaming at Iowa)	145.01
W0GKP-1	MNDUL	Duluth, Mn	Node(2)		145.01
K8ZAS	ESC	Escanaba, MI	Digi		145.01
W9CWD	MSN	Fitchburg	Digi		145.07
WB9OWN		Franklin	PBBS	Xerox 820	145.01
KB9OK-1		Germantown	PBBS/DUAL	GATE GTWN/DIGI	145.01
KB9OK-2		Germantown	KA/NODE &	GER/GATEWAY	145.03
KA9WPG	WPG	Green Bay	PBBS	MBL 5.12	145.01
WA8FXQ-2	IMT	Iron Mountain, MI	Digi	N2WX Type Switch	145.01
WB8CHJ-2	IRN	Iron River, MI	Node(2)	No Digi	145.01
KD9JK-2	JVL	Janesville	Digi/PBBS	MBL 5.12	145.07
WA9FIO-1	LSE	La Crosse	Node(1)		145.01
WD9ESU-1		Lodi	PBBS	W0RLI	145.07
N9HAD-1		Madison	PBBS		145.07
N9HAD-2	BOB	Madison	KA/NODE		145.07
WB9QHD-13		Madison	Node(1)	Wormhole to #MKEB & MAD	WIRED
WB9QHD-15	MAD	Madison	Node(1)	Wormhole to MQTA	145.01
W9WI-1		Madison	PBBS	MBL 5.12	145.01
W9WI-1		Madison	PBBS	MBL 5.12	145.07
KB9WC-1		Markesan	PBBS	Ka/Node	145.01
KB9WC-2	GLK	Markesan	KA/NODE	Ka/Node	145.01
W8OLE-1	MQT	Marquette, MI	Node(1)	No Digi	145.01
WB9QHD-14	MQTA	Marquette, MI	Node(1)	Wormhole to MAD	145.01
WB9TYT	TYT	Milwaukee	Digi/PBBS	MBL 5.12	145.01
WB9TYT		Milwaukee	PBBS	MBL 5.12	14.107
WD9ANY	NWB	New Berlin	Digi/PBBS	MBL 5.12	145.09
WA9SOU-2	NFR	North Freedom	Digi		145.01
WA9KEC-2	KEC	North Prairie	Node(2)		145.09
WA9KEC-3	#KECB	North Prairie	Node(2)		446.10
WA9KEC-4	#KECS	North Prairie	Node(2)	Conn WA9KEC BBS	WIRED
WA9KEC		North Prairie	PBBS	MBL 5.12	WIRED
WA9KEC		North Prairie	PBBS	SE Wis. LAN	145.09
N9CCI	ORO	Oro	Digi		145.01
WA9FIO-2	LSE2	Onalaska	Node(2)		145.09
W9LZQ-1		Onalaska/Winona	PBBS	MBL 5.12	145.01
W9LZQ-1		Onalaska/Winona	PBBS	MBL 5.12	145.09
N9GDY	OSH	Oshkosh	Digi/PBBS	MBL 5.12	145.01
N9BQM	PIT	Pittsville	Digi		145.01
N9BQM-1	PITT	Pittsville	PBBS	Ka/Node	145.01
NF9R-1	SHE	Plymouth	Node(1)		145.01
NF9R-2	SHE220	Plymouth	Node(1)		223.44
NF9R-3	#SHEB	Plymouth	Node(1)		446.10
WB9ZRE-1		Ripon	PBBS	Ka/Node	145.01
WB9ZRE-2		Ripon	KA/NODE		145.01
W9ZBD-1		Rhineland	PBBS	MBL 5.12	145.01
W9ZBD-1		Rhineland	PBBS	MBL 5.12	14.111
W9ZBD-3	WIRHI	Rhineland	Node(2)		145.01
VE3FOD	FOD	Sault St. Marie	Digi/PBBS	MBL 5.12	145.01
VE3GF		Sault St. Marie	Digi/PBBS	MBL 5.12	145.01
WB9TYT-7	SLG	Slinger	Node(2)		145.01
WB9TYT-8	#SLGB	Slinger	Node(2)		446.10
KD9NV	SPT	Stevens Point	Digi/PBBS	W0RLI 9.01	145.01
KD9NV	SPTL	Stevens Point	Digi/PBBS	W0RLI 9.01	145.09
WB9QFW	STE	Stevens Point	Node(1)	CWRA	145.01
WA9KLM		Superior	PBBS	MBL 5.12	145.01
VE3CX-2	TBN	Thunder Bay, Ont	Node(2)		145.01
VE3CX		Thunder Bay, Ont	PBBS	MBL 5.12	145.01
N9BOE-1		Tomah	Digi		145.01
N9CLE-1	AUM	Wausau	Node(1)		145.01
WB9ARG		Viroqua	Digi	(AA9M Digi)	145.01
WA9PDV-9	#MKEB	Waukesha	Node(2)	Wormhole to QHD-13	446.10
N9BKJ	BKJ	Waupaca	BBS	W0RLI 9.01	145.01
W9PY		Whitefish Bay	Digi		145.03

Node(1) NET/ROM  
Node(2) TheNet

WAPR-3/6/89

This listing will be updated and released periodically. Send additions and changes to WAPR @ WB9TYT. Upper Peninsula and adjacent Ontario stations are listed for your convenience because of their close networking relationship with Wisconsin.

## Comments on Packet Operations

Today we are witnessing an fantastic growth in packet operations. We are experimenting with various options for the future, however, the way we are utilizing these newer and different types of packet operation is creating unacceptable interference to established operations. It is not my intent to create friction between the different packet interests, rather, I would like to have everyone think about this present growing situation, in order that practical solutions will insure that all types of operation can co-exist in harmony.

The early days of amateur packet radio were basic, real-time keyboard to keyboard contacts. Beam antennas were used to reach out to distant stations and the MONITOR command was regularly left on in order to capture the few packets that could be heard. Due to the low packet population, operation was almost exclusive to 145.01. Later, digipeater development allowed more distant keyboard to keyboard contacts. Beam antennas were being replaced by omnidirectional antennas and the packet population began to grow more rapidly. The Monitor command was usually turned off during contacts due to the increase in packet activity. BBSs arose and soon began using these same digipeaters to forward their mail and traffic to other BBSs. Thru the years, development of new software/firmware and hardware have established the regular use of digipeaters/nodes, bulletin board systems, and gateways. Recent developments that are gaining rapid acceptance include TCP/IP, Packet Cluster and the personal mailbox (PBBS). Each one of these developments can benefit, to a certain extent, from the others.

There is, however, a 'saturation point' to consider that will render the 145.01 frequency unusable in the very near future unless steps are taken to minimize extraneous operations.

One problem, I see, lies with the personal mailbox. It seems that everyone who gets one thinks that PBBS stands for "Packet Bulletin Board System" and therefore most set up their "Personal Mailbox" on 145.01, 24 hours a day sending beacons out as far as they can, informing everyone that a their PBBS is on the air. They then request the local major BBS's Sysop to start autoforwarding their messages to their PBBS on 145.01. I am not against the use of these personal mailboxes, rather, against how they are being used and this, I feel, represents unnecessary frequency usage on 145.01. The practical alternative here would be to create a Local Area Net frequency, which the area's major BBS can support thru an auxiliary port. This accomplishes a few objectives:

- 1.) Moves the PBBS's and area user operations to the LAN, optimizing local operations and minimizing local congestion to 145.01.
- 2.) Would establish dependable station/digipeater/PBBSs on the LAN that would be effectively used for area keyboard to keyboard/PBBS contacts, including emergency operations.
- 3.) Allow the major BBS to autoforward mail to PBBSs on the LAN without additional congestion of 145.01.
- 4.) Greatly increase the 145.01 forwarding speed

(continued on page 4)



# Yellow Thunder Amateur Radio Club



**Harry Westlund, K9EHJ,**  
**Secretary**  
**720 Jefferson Street**  
**Baraboo, WI 53913**

The next meeting of the YTARC will be held on Thursday, April 13, 1989 in room 25 of the Baraboo Civic Center, Baraboo WI.

The March 15, 1989 meeting of the Yellow Thunder Amateur Radio Club, Inc. was called to order at 7:55 p.m.

The following members and guests were present:

Duane Grotophorst, KA9HKL	Loganville
Glenn Bennett	North Freedom
Darlene Bennett	North Freedom
Harry Westlund, K9EHJ	Baraboo
Steve Schwoegler, WB9RNL	Wisconsin Dells
Bill Klinkner	Sauk City
Art Kleefisch, W9WSS	Baraboo
Ken Ebner, K9EN	Portage

The minutes of the last meeting were approved as published in B.S.S.S.

The Treasurers report was given as: operating balance of \$155.77 and a total balance of \$189.34.

The President asked for participation in the Wisconsin QSO party on March 19, 1989.

Bill Klinkner passed around a new carrying case for Handi Talkies. He wished to get opinions about marketing this new product.

Buck Night was won by Dennis Sweeney, who was not present.

The meeting was adjourned at 8:15 p.m. The group then viewed a video on "The Aurora Borealis" provided by the ARRL. A very timely subject at this time.

Respectfully Submitted  
Harry Westlund, K9EHJ, Secretary

## YTARC BIRTHDAY

Art Escher	WA9WUS	March	12
Fred Becker	W9KKM	March	17

## SENTENCE SERMON

Begin by doing what you want to do, and you'll end by doing what you must. Begin by doing what you must, and you will end by doing what you want to do.

## TESTPOINT (continued from page 3)

Third Saturday of every month.  
Northern Illinois Volunteer Examiners (DeVry VEC). Held at North Suburban Library on North Second Street in Loves Park, IL. Contact: Gene Melton, AK9N, 2901 Billie Rd., Rockford, IL 61109, (815) 874-6867

## MINNESOTA TESTS

April 15, 1989	Minneapolis ARC & Gopher ARC
May 13, 1989	ARA Bloomington
May 20, 1989	Robbinsdale ARC
June 10, 1989	ARA Bloomington
June 17, 1989	Amateur Fair - SPRC
July 8, 1989	ARA Bloomington
July 16, 1989	Minneapolis ARC & Gopher ARC
August 12, 1989	ARA Bloomington
September 9, 1989	ARA Bloomington
September 23, 1989	SPRC
October 14, 1989	ARA Bloomington
October 21, 1989	Minneapolis ARC & Gopher ARC
October 27, 1989	Hamfest Minnesota
	Robbinsdale ARC
December 2, 1989	SPRC
December 9, 1989	ARA Bloomington

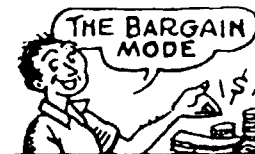
## Contact:

ARA Bloomington, Art Putt, KD0CL 881-7181  
SPRC, Mary Ketzler, KS0OMX 426-4438  
Minneapolis ARC & Gopher ARC,  
Jeff Kolb, WB5MTV 699-6861  
Robbinsdale ARC, Ron Schultz, NA0U 920-7473

The above listing of Minnesota tests came from the Ground Wave newsletter published by the St. Paul ARC. If you are interested in any of these exams, save this issue as BSSS may not be able to include the information in every issue.

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules. Please send us your schedules of dates, times, and locations that you will be conducting

examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN or K9ZZ at the address shown on page 2.



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FOR SALE: SENCORE test equipment - DVM56A Digital Voltmeter, \$600.00; 2 PR57 "Powerite", \$300.00 each; SC61 Oscilloscope, \$2000.00; VA62 Video Analyzer with NT64 NTSC adaptor, VC63 VCR adaptor, and expander adaptor, \$2800.00; CR70 CRT tester/restorer, \$800.00. SC61 & PR57s are less than 2 years old, others less than 4 years. Kenneth A. Ebner, 822 Wauona Trail, Portage, WI 53901. (608) 742-3560.

FOR SALE: TEKTRONIX 7504 oscilloscope with the following: 2 7A16 vertical amplifiers, 7A22 differential amplifier, 7B50 time base, 7B51 delay time base, 7D13 digital multimeter, 7M11 delay line, 204-1 mobile cart & probes. Working in good condition but some modules may need minor repairs. \$2000.00. Kenneth A. Ebner, 822 Wauona Trail, Portage, WI 53901. (608) 742-3560.

One Novice (a ham, not a nun) thought Winchester Cathedral was where they hold shotgun weddings.

A shotgun wedding is a case of wife or death.

We just heard on 40 meters that one is never too old to learn some new way to be foolish.

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South Milwaukee ARC PO Box 102  
Milwaukee, WI 53172

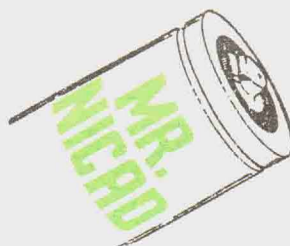
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